

F

MATERIAL SAFETY DATA SHEET

Product Name: F Series Glazes Lead Free Product Code: F Series (1)

Manufacturer's Name: American Art Clay Co., Inc.
6060 Guion Road
Indianapolis, IN 46254

Information Number: (800) 374-1600 Emergency Number: (800) 374-1600

Section I – Product Identification

Product Name: F - Series Glazes Product Class: Ceramic Glazes Product Size: 16oz.

F 1, 10, 11, 15, 20, 21, 22, 23, 25, 30, 31, 40, 41, 42, 43, 50, 51, 52, 53, 54, 55, 57, 58, 60, 61, 65, 66, 70, 71 and Class Packs

Section II – Hazardous Ingredients

Reportable Components	CAS#	Vapor Pressure Mm Hg @ Temp	Weight Percent
Water	7732-18-4		
Sod. Borosilicate Frit	65997-18-4		
Clay	1332-58-7		
Flint	14808-60-7		
Gum	9004-32-4		

No reportable quantities of hazardous ingredients are present.
No hazardous ingredients. Carries the "AP" Seal. Labeling conforms to ASTM D4236.

Section III – Physical / Chemical Characteristics

Boiling Range: NA	Specific Gravity (H ₂ O=1): Less than 2
Vapor Density: Heavier than Air.	Evaporation Rate: NA
Coating V.O.C.: NA	Material V. O.C.: NA
Appearance and Odor: Liquid	

Section IV – Fire and Explosion Hazards Data

Flash Point: NA	Method Used: NA
Flammable Limits In Air by Volume: NA - Lower	NA - Upper
Extinguishing Media: NA	
Special Firefighting Procedures: No fire hazard	
Unusual Fire and Explosion Hazards: No fire hazard.	

Section V – Reactivity Data

Stability: Stable	Conditions to Avoid: None.
Incompatibility (Materials to Avoid): None.	
Hazardous Decomposition or Byproducts: Will not occur.	
Hazardous Polymerization: Will not occur.	

Section VI – Health Hazards

Inhalation Health Risks and Symptoms of Exposure: None.

Skin and Eye Contact Health Risks and Symptoms of Exposure: E – Rinse eyes thoroughly with water for 15 minutes. If irritation persists contact physician. Skin – Wash hands with soap and water after using.

Skin Absorption Health Risks and Symptoms of Exposure: None.

Ingestion Health Risks and Symptoms of Exposure: No hazardous ingredients.

Health Hazards (Acute/ Chronic): No hazardous ingredients.

Carcinogenicity: N – NTP Carcinogen N – IARC Monographs N – OSHA Regulated

Medical Conditions Generally Aggravated by Exposure: Unknown.

Emergency First Aid Procedures: Contact you local poison control for further health information.

Section VII Precautions For Safe Handling and Use

Steps to be taken in case material released or spilled: Specific steps not necessary.

Waste Disposal Method: Dispose of paper towel in trash and rinse sponge. In manufacturing, dispose of in accordance to Local, State or Federal regulations.

Precautions to be taken in handling and storing always keep lid tightly on jar of moist product while not in use or storage. Uncovered product will dry out.

Other precautions: None.

Section VIII – Control Measures

Respiratory Protection: Not need for brush or sponge application. When spraying, use NIOSH certified mask for dust or mist.

Ventilation: No needed for normal application. When spraying glazes use spray booth.

Protective Gloves: Not needed.

Eye Protection: Not needed.

Other Protective Clothing or Equipment: Not needed.

Work / Hygienic Practices: Refer to AMACO Product Encyclopedia & Safety Manual. Manual available upon request.

Section IX – Disclaimer

Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Since conditions of use are beyond our control we make no warranties, expressed or implied, except those that may be contained in our written acknowledgement.

MATERIAL SAFETY DATA SHEET

PRODUCT: F Series Glazes Lead free Copper/Cobalt Product Code: F Series (2)

Manufacturer's Name: American Art Clay Co., Inc.
6060 Guion Road
Indianapolis, IN 46254

Information Number: (800) 374-1600

Emergency Number: (800) 374-1600

Section I – Product Identification

Product Name: F Series Glazes Lead free Copper/Cobalt Product Class: Ceramic Glaze Product Size: 16 oz.

F 26, 27, 47

Section II – Hazardous Ingredients

Reportable Components	CAS#	Vapor Pressure Mm Hg @ Temp	Weight Percent
Copper Oxide Blend	1317-38-0		5
Copper Oxide – ACGIH TLV 1mg/M3, OSHA PEL 1 mg/M3 @ CU			
Cobalt Silicate Blue Olivine	77364		5.05
Cobalt – ACGIH TLV .02mg/M3, OSHA PEL .10mg/M3 @ CO			
Copper Carbonate	7492-68-4		5
Copper – ACGIH TLV 1mg/M3, OSHA PEL 1 mg/m3@ CU			
Water	7732-18-5		
Gum	9004-32-4		

Carries the CL/HL Seal. Labeling conforms to ASTM D4236. Contains copper or cobalt. Refer to Section VI.

Section III – Physical / Chemical Characteristics

Boiling Range: NA Specific Gravity (H2O=1): Less than 2
Vapor Density: Heavier than Air Evaporation Rate: NA
Coating V.O.C.: NA Material V.O.C.: NA
Appearance and Odor: Liquid

Section IV- Fire and Explosion Hazard Data

Flash Point: NA Method Used: NA
Flammable Limits In Air By Volume: NA - Lower NA - Upper:
Extinguishing Media: NA
Special Firefighting Procedures: No fire hazard.
Unusual Fire and Explosion Hazards: No fire hazard.

Section V – Reactivity Data

Stability: Stable Conditions to Avoid: None.
Incompatibility (Materials to Avoid): None.
Hazardous Decomposition or Byproducts: Will not occur.
Hazardous Polymerization: Will not occur.

Section VI – Health Hazard Data

Inhalation Health Risks and Symptoms of Exposure: None. Product not for spray application
Skin and Eye Contact Health Risks and Symptoms of Exposure: Eye – rinse eyes with water for 15 minutes. If irritation persists contact physician. Skin – wash with soap and water after use.

Ingestion Health Risks and Symptoms of Exposure: May be harmful if swallowed. Exposure may cause damage to the kidneys or liver or anemia. If swallowed get prompt medical attention.

Health Hazard (Acute / Chronic): Contains soluble Copper/Cobalt. See above.

Carcinogenicity: N - NTP Carcinogen N - IARC Monographs N - OSHA Regulated

Medical Conditions Generally Aggravated By Exposure: Unknown.

Emergency and First Aid Procedures: Contact your local poison control center for further information.

Section VII – Precautions for Safe Handling

Steps to be taken if material spilled or released: Specific steps not necessary.

Waste disposal Method: Dispose of paper towel in trash and rinse sponge. In manufacturing, dispose of in accordance to Local, State or Federal regulations.

Precautions to be taken in handling and storing: Always keep lid tightly on jar or moist product while not in use or storage. Uncovered product will dry out.

Other Precautions: **Not for use by children or in healthcare facilities.**

Section VIII – Control Measures

Respiratory Protection: Not needed for brush or sponge application.

Ventilation: Not need.

Protective Gloves: Not needed.

Eye Protection: Not needed.

Other Protective Clothing or Equipment: Not needed.

Work / Hygienic Practices: Refer to AMACO Product Encyclopedia & Safety Manual. Manual available upon request.

Section IX – Disclaimer

Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Since conditions of use are beyond our control we make no warranties, expressed or implied, except those that may be contained in our written acknowledgement.

Prepared by: L. Jenkins
2007

SAFETY DATA SHEET

State Industrial Products

5915 Landerbrook Drive
Mayfield Heights, OH 44124
To Order Call: 1-866-747-2229

6935 Davand Drive
Mississauga, Ontario L5T 1L5
To Order Call: 1-800-668-6513

Royal Industrial Park, Bldg "M"
Local #5, Carr 869, km 1.5 Palmas
Cataño, P.R. 00962
To Order Call: 787-275-3185



1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: F. 625 CLOSED LOOP TREATMENT

24 Hour Emergency CHEMTREC Number: 800-424-9300

Product Description: A formulated concentrated closed loop cooling and heating treatment.

MSDS Number: M01253

EPA Registration Number: NA

EPA Establishment Number: NA

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

FIFRA Hazard Classification:

Not Applicable

Skin corrosion/irritation: Category 1A, B, C

Acute toxicity; oral: Category 4

Skin corrosion/irritation: Category 2

Corrosive to metals: Category 1



Corrosive

Exclamation
Mark

DANGER

Hazard Statements:

H314 Causes severe skin burns and eye damage. H302 Harmful if swallowed. H315_3 Causes skin irritation. H290 May be corrosive to metals.

Precautionary Statements:

P234 Keep only in original container. P261 Avoid breathing vapors. P264 Wash hands thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves, protective clothing, and eye protection.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	CAS Number	Weight	ACGIH	OSHA
Potassium Hydroxide	1310-58-3	<3.0%	2 mg/m ³	2 mg/m ³
Sodium Nitrite	7632-00-0	<10%	NE	NE
Sodium Metaborate	10555-76-7	<17%	10 mg/m ³	15 mg/m ³
Sodium Tolytriazole	64665-57-2	<2.0%	NE	NE
Sodium Nitrate	7631-99-4	<3.0%	NE	NE
Acrylic Polymer	Acrylic Polymer (Proprietary)	<3.0%	NE	NE

The exact percentages have
been withheld as a trade secret.

4. FIRST AID MEASURES

P301+P312 IF SWALLOWED: call a POISON CENTER or physician if you feel unwell. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332+P313 IF SKIN irritation occurs: Get medical attention. P362+P364 Take off contaminated clothing and wash before reuse. P390 Absorb spillage to prevent material damage.

5. FIRE FIGHTING MEASURES

Flashpoint(Method): >200°F [93°C]

Lower Explosive Limit(LEL): NA Upper Explosive Limit(UEL): NA Autoignition Temperature: NA

Flammable Properties: None Expected

Extinguishing Media: Carbon Dioxide, dry chemical, foam.

Fire Fighting Instructions: Wear a self-contained breathing apparatus with full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Ventilate area. Halt spill at source, dike and contain spill. Flush with plenty of water to drain. Dispose of in accordance with Federal, State and Local Regulations regarding waste disposal.

7. HANDLING AND STORAGE

P402 Store in dry place. P405 Store locked up. P406 Store in corrosive resistant container with a resistant inner liner.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Use general or local ventilation to keep exposure levels below exposure limits.

Personal Protective Equipment:

Respiratory: Normal room ventilation is adequate. Use a NIOSH/MHSA approved respirator if exposure limits are exceeded.

Eye: Wear approved safety glasses or goggles with unperforated eyeshields where splashing may occur.

Skin: For repeated or prolonged contact, wear chemically impervious gloves such as Nitrile.

Other: An emergency eyewash station or source of clean potable water should be available in case of accidental eye contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, amber
Physical State: Liquid
Solubility in Water: 100%
Boiling Point: >212 °F[100°C]
Freezing Point: NA
Melting Point: NA

Odor: Mild.
pH: 11.2 +/- 0.5 @ 1.4:100
Diluted pH: NA
Specific Gravity: 1.173 - 1.190
VOC Content: 0%

10. STABILITY AND REACTIVITY

Stability: Stable

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Aluminum, leather, wool, tin and related alloys. Use through pressure washer or steam cleaner.

Incompatibility: Strong acids or bases may deactivate.

Hazardous Decomposition Products: Carbon Dioxide, Carbon Monoxide

11. TOXICOLOGICAL INFORMATION

This product contains no ingredient at 0.1% or greater that is listed as a human carcinogen.

<u>Hazardous Ingredients</u>	<u>CAS Number</u>	<u>LD50</u>	<u>LC50</u>
Potassium Hydroxide	1310-58-3	365 mg/kg (oral rat)	179 mg/l/96 hr (flathead minnow)
Sodium Nitrite	7632-00-0	180 mg/kg (oral rat)	7,5 ppm/48 hr (mosquito fish)
Sodium Metaborate	10555-76-7	2330 mg/kg (oral rat)	133 B/l/48 hr (daphnia magna)
Sodium Tolytriazole	64665-57-2	NE	NE
Sodium Nitrate	7631-99-4	NE	NE
Acrylic Polymer	Acrylic Polymer (Proprietary)	NE	NE

12. ECOLOGICAL INFORMATION

This product is toxic to fish.

13. DISPOSAL CONSIDERATIONS

P501 Dispose of container in accordance with all Federal, State and Local Regulations regarding waste disposal.

14. TRANSPORT INFORMATION

DOT Shipping Data: UN1760, CORROSIVE LIQUIDS, N.O.S. (Potassium-Hydroxide), 8, II

Canadian TDG: UN1760, CORROSIVE LIQUIDS, N.O.S. (Potassium-Hydroxide), 8, II

For International Shipments by Air: UN1760, CORROSIVE LIQUIDS, N.O.S. (Potassium-Hydroxide), 8, II

For International Shipments by Vessel: UN1760, CORROSIVE LIQUIDS, N.O.S. (Potassium-Hydroxide), 8, II

15. REGULATORY INFORMATION

TSCA: All ingredients in this product are listed or exempt from listing on the TSCA Chemical Inventory.

CEPA: All ingredients in this product are listed or exempt from listing on the Canadian DSL/NDSL.

Proposition 65: This product can expose you to acrylamide which is known to the state of California to cause cancer and birth defects or other reproductive harm.

For more information go to www.P65Warnings.ca.gov

SARA 313: This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40CFR372): Sodium Nitrate CAS# 7632-00-0 < 2.0%

VOC: 0%

HMIS RATING: HEALTH = 3 FLAMMABILITY = 0 REACTIVITY = 1 PPE = B

WHMIS RATING: See hazards identified in Section 2 above.

16. OTHER INFORMATION

NA = Not Available or Not Applicable

NE = Not Established

Read and follow all label directions and precautions before using the product. This product is intended for industrial and institutional use only. NOT FOR HOUSEHOLD USE OR RESALE. KEEP OUT OF THE REACH OF CHILDREN. While we believe that the data contained herein is factual and the opinions expressed are those of qualified experts, the data are not to be taken as a warranty or representation for which the company assumes legal responsibility. They are offered solely for your consideration, investigation, and verification. Any use of these data and information must be determined by the user to be in accordance with applicable Federal, State, and Local Laws and regulations.

Prepared On: 12/28/2020

Replaces: 02/19/2013

FICHE SIGNALÉTIQUE DE SÉCURITÉ

State Industrial Products

5915 Landerbrook Drive
Mayfield Heights, OH 44124
To Order Call: 1-866-747-2229

6935 Davand Drive
Mississauga, Ontario L5T 1L5
To Order Call: 1-800-668-6513

Royal Industrial Park, Bldg "M"
Local #5, Carr 869, km 1.5 Palmas
Cataño, P.R. 00962
To Order Call: 787-275-3185



1. IDENTIFICATION DU PRODUIT CHIMIQUE ET DE LA SOCIÉTÉ

Nom du produit : F. 625 CLOSED LOOP TREATMENT
Description du produit : produit de traitement concentré pour circuits de chauffage et de refroidissement en bouche fermée.
EPA Registration Number : NA

Numéro d'urgence CHEMTREC 24 h/24 : 800-424-9300
Numéro de la fiche signalétique de produit : M01253

EPA Establishment Number : NA

2. IDENTIFICATION DES DANGERS

VUE GÉNÉRALE D'URGENCE



Corrosif

Point
d'exclamation

DANGER

Mention de danger:

H314 Provoque des brûlures de la peau et des lésions oculaires graves. H302 Nocif en cas d'ingestion. H315_3 Provoque une irritation cutanée. H290 Peut être corrosif pour les métaux.

Conseils de prudence:

P234 Conserver uniquement dans le récipient d'origine. P261 Éviter de respirer les vapeurs. P264 Se laver soigneusement la peau après manutention.
P270 Ne pas manger, boire ou fumer en manipulant ce produit. P280 Porter des gants de protection, des vêtements de protection, une protection oculaire.

3. COMPOSITION/INFORMATION SUR LES INGRÉDIENTS

Ingrédients dangereux	Numéro CAS	Poids	ACGIH	OSHA
Potassium Hydroxide	1310-58-3	<3.0%	2 mg/m ³	2 mg/m ³
Nitrite de sodium	7632-00-0	<10%	NE	NE
Métaborate de sodium	10555-76-7	<17%	10 mg/m ³	15 mg/m ³
Sodium Tolytriazole	64665-57-2	<2.0%	NE	NE
Nitrate de sodium	7631-99-4	<3.0%	NE	NE
Polymère Acrylique	Acrylic Polymer (Proprietary)	<3.0%	NE	NE

The exact percentages have
been withheld as a trade secret.

4. PREMIERS SOINS

P301+P312 EN CAS D'INGESTION : Appeler un CENTRE ANTIPOISON ou un médecin en cas de malaise. P301+P330+P331 EN CAS D'INGESTION : Rincer la bouche. NE PAS faire vomir. P302+P352 EN CAS DE CONTACT AVEC LA PEAU: laver abondamment à l'eau et au savon. P304+P340 EN CAS D'INHALATION : Transporter la victime à l'extérieur et la maintenir au repos dans une position où elle peut confortablement respirer. P305+P351+P338 EN CAS DE CONTACT AVEC LES YEUX: rincer avec précaution à l'eau pendant plusieurs minutes. Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer. P332+P313 En cas d'irritation cutanée: consulter un médecin. P362+P364 Retirer les vêtements contaminés et lessiver avant de les porter de nouveau. P390 Absorber toute substance répandue pour éviter qu'elle attaque les matériaux environnants.

5. EN CAS D'INCENDIE

Point d'clair : >200°F [93°C]

Limite d'explosivité inférieure (LIE) : NA Limite d'explosivité supérieure (LSE) : NA

Température d'auto-inflammation : NA

Propriétés d'inflammabilité : aucune présumée

Moyens d'extinction : Dioxyde de carbone, poudre chimique, mousse extinctrice.

Lutte contre l'incendie : Porter un appareil respiratoire autonome et des vêtements de protection complète.

6. ÉMISSIONS ACCIDENTELLES

Ventiler la zone. Interrompre le déversement à la source, l'endiguer et le contenir. Évacuer à grande eau. Éliminer conformément aux réglementations fédérale, provinciale et locale en vigueur en matière d'élimination des déchets

7. MANIPULATION ET CONSERVATION

P402 Stocker dans un endroit sec. P405 Entreposer dans un endroit verrouillé. P406 Entreposer dans un contenant résistant à la corrosion muni d'un revêtement intérieur non corrosif.

8. EXPOSITION/PROTECTION INDIVIDUELLE

Moyens techniques : Assurer une ventilation forcée adéquate pour maintenir l'exposition en deçà de la valeur limite d'exposition.

Équipement de protection individuelle :

Respiratoire : La ventilation normale est suffisante. Si les limites d'exposition sont dépassées, utiliser un appareil respiratoire agréé NIOSH/MSHA.

Oculaire : Porter des lunettes de protection homologuées munies d'écrans latéraux non perforés.

Cutanée : En cas de contact répété ou prolongé, porter des gants de protection chimique.

Autre : Un bassin oculaire d'urgence ou une source d'eau potable propre devrait être prêt à être utilisé en cas de contact oculaire accidentel.

9. PROPRIÉTÉS PHYSIQUES ET CHIMIQUES

Aspect : Effacer, ambre
État de la matière : Liquide
Solubilité dans l'eau : 100%
Contenu de VOC : 0%

Odeur : Doux
Concentrer pH : 11.2 +/- 0.5 @ 1.4:100
Dilué pH : NA
Densité : NA
Point de congélation/fusion : NA / NA

10. STABILITÉ ET RÉACTIVITÉ

Stabilité : Stable

Polymérisation dangereuse : Ne se produira pas.

Conditions à éviter : Aluminium, le cuir, la laine, de l'étain et alliages connexes. Utilisez par nettoyeur haute pression ou un nettoyeur à vapeur.

Incompatibilité : les acides ou les bases fortes peuvent avoir un effet désactivant.

Produits de décomposition dangereuse : Monoxyde de carbone, dioxyde de carbone.

11. INFORMATIONS TOXICOLOGIQUES

Ce produit ne contient aucun ingrédient déclaré cancérigène humain à des teneurs supérieures ou égales à 0,1 %.

<u>Ingrédients dangereux</u>	<u>Numéro CAS</u>	<u>LD50</u>	<u>LC50</u>
Potassium Hydroxide	1310-58-3	365 mg/kg (oral rat)	179 mg/l/96 hr (flathead minnow)
Nitrite de sodium	7632-00-0	180 mg/kg (oral rat)	7,5 ppm/48 hr (mosquito fish)
Métaborate de sodium	10555-76-7	2330 mg/kg (oral rat)	133 B/l/48 hr (daphnia magna)
Sodium Tolytriazole	64665-57-2	NE	NE
Nitrate de sodium	7631-99-4	NE	NE
Polymère Acrylique	Acrylic Polymer (Proprietary)	NE	NE

12. INFORMATIONS ÉCOLOGIQUES

Ce produit est toxique pour les poissons.

13. DESTRUCTION

P501 Éliminer le contenant conformément à tous les règlements fédéraux, d'État et locaux en matière d'élimination des déchets.

14. TRANSPORT

INFORMATION DE TRANSPORT D.O.T. : UN1760, LIQUIDES CORROSIFS, NOS (hydroxyde de potassium), 8, II

TMD AU CANADA : UN1760, LIQUIDES CORROSIFS, NOS (hydroxyde de potassium), 8, II

Pour les expéditions internationales par Air : UN1760, LIQUIDES CORROSIFS, NOS (hydroxyde de potassium), 8, II

Pour les expéditions internationales par Vessel :

15. INFORMATIONS RÉGLEMENTAIRES

TSCA : Tous les ingrédients contenus dans ce produit figurent ou sont exempts de figurer sur l'inventaire du TSCA.

CEPA : Tous les ingrédients contenus dans ce produit figurent ou sont exempts de figurer sur la LIS et la LES (Canada).

Proposition 65 :

SARA 313 : Ce produit contient des produits chimiques toxiques soumettent à des exigences en matière de divulgation de l'article 313 de la Loi Emergency Planning and Community Right-To-Know de 1986 (40CFR372): Nitrate de sodium 7632-00-0 <2.0%

CLASSIFICATION HMIS : SANTÉ = 3 INFLAMMABILITÉ = 0 RÉACTIVITÉ = 1 EPS = B

CLASSIFICATION SIMDUT : Voir les risques identifiés dans la section 2 ci-dessus.

16. AUTRES INFORMATIONS

néant = Non disponible ou sans objet

n.e. = Non établi

Lire et suivre toutes les instructions et les précautions d'emploi figurant sur l'étiquette avant d'utiliser le produit. Ces produits sont réservés uniquement à l'usage industriel et par les collectivités. CES PRODUITS NE SONT PAS DESTINÉS À L'USAGE DOMESTIQUE OU À LA REVENTE. GARDER HORS DE LA PORTÉE DES ENFANTS. Bien qu'à notre avis les informations énoncées ci-dessus soient réelles et que le jugement exprimé soit celui d'experts qualifiés, elles ne doivent pas être considérées comme une garantie ou une déclaration pour lesquelles la société assume une responsabilité légale. Ces informations sont données uniquement pour examen, investigation et vérification. L'utilisation de ces informations doit être déterminée par l'utilisateur conformément à la réglementation et à la loi fédérales, d'État et régionales applicables.

INFORMATIONS SUR LA SANTÉ ET LA SÉCURITÉ : (216) 861-7114

Date de Préparation: 12/28/2020 Remplace : 02/19/2013

PLANILLA DE DATOS DE SEGURIDAD

State Industrial Products

5915 Landerbrook Drive
Mayfield Heights, OH 44124
To Order Call: 1-866-747-2229

6935 Davand Drive
Mississauga, Ontario L5T 1L5
To Order Call: 1-800-668-6513

Royal Industrial Park, Bldg "M"
Local #5, Carr 869, km 1.5 Palmas
Cataño, P.R. 00962
To Order Call: 787-275-3185



1. PRODUCTO QUÍMICO Y DATOS DE LA COMPAÑÍA

Nombre del producto: F. 625 CLOSED LOOP TREATMENT

Núm. CHEMTREC las 24 horas: 800-424-9300

Descripción del producto: concentrado para tratamiento de sistemas cerrados de calefacción y refrigeración.

Número MSDS: M01253

EPA Registration Number: NA

EPA Establishment Number: NA

2. ENUMERACIÓN DE PELIGROS

DESCRIPCIÓN GENERAL DE LAS SITUACIONES DE EMERGENCIA



Corrosivo

Signo de exclamación

PELIGRO

H314 Provoca quemaduras graves en la piel y lesiones oculares graves. H302 Nocivo en caso de ingestión. H315_3 Provoca irritación cutánea. H290 Puede ser corrosivo para los metales.

P234 Mantener en el recipiente original. P261 Evitar respirar humo. P264 Lavar la piel meticulosamente después de la manipulación. P270 No comer, beber ni fumar durante su utilización. P280 Llevar guantes protectores, ropa protectora, protección en los ojos.

3. COMPOSICIÓN/INFORMACIÓN SOBRE LOS COMPONENTES

Componentes peligrosos	Número CAS	Peso	ACGIH	OSHA
Potassium Hydroxide	1310-58-3	<3.0%	2 mg/m3	2 mg/m3
Nitrito de Sodio	7632-00-0	<10%	NE	NE
Metaborato de sodio	10555-76-7	<17%	10 mg/m3	15 mg/m3
Sodium Tolytriazole	64665-57-2	<2.0%	NE	NE
Nitrato de sodio	7631-99-4	<3.0%	NE	NE
Polímero De acrílico	Acrylic Polymer (Proprietary)	<3.0%	NE	NE

The exact percentages have been withheld as a trade secret.

4. MEDIDAS DE PRIMEROS AUXILIOS

P301+P312 EN CASO DE INGESTIÓN: llamar a un CENTRO DE TOXICOLOGÍA o médico SI se siente indispuesto. P301+P330+P331 EN CASO DE INGESTIÓN: Limpie la boca. NO provoque el vómito. P302+P352 EN CASO DE CONTACTO CON LA PIEL: Lavar con agua y jabón abundantes. P304+P340 EN CASO DE INHALACIÓN: Lleve a la víctima al aire fresco y Mantenga descansando en una posición cómoda para respirar. P305+P351+P338 EN CASO DE CONTACTO CON LOS OJOS: Aclarar cuidadosamente con agua durante varios minutos. Quitar las lentes de contacto, si lleva y resulta fácil. Seguir aclarando. P332+P313 En caso de irritación cutánea: Consultar a un médico. P362+P364 Quitar la ropa contaminada y lavar antes de reutilizar. P390 Absorber el vertido para que no dañe otros materiales.

5. MEDIDAS PARA COMBATIR INCENDIOS

Pto. inflamabilidad: >200°F [93°C]

Límite explosivo inferior (LEL): NA Límite explosivo superior (UEL): NA Temperatura de autoignición: NA

Inflamabilidad: No se espera ninguna.

Medio extinguidor: Dióxido de carbono, productos químicos en polvo, espuma.

Instrucciones para combatir el fuego: Use un aparato de respiración independiente con indumentaria de protección total.

6. MEDIDAS EN CASO DE DERRAME ACCIDENTAL

Ventile el área. Coloque una barrera física y contenga el derrame en el propio sitio de origen. Limpie el derrame con agua en abundancia y vierta todo por el drenaje. Obedezca todos los reglamentos federales, estatales y locales relativos a la disposición final de residuos.

7. MANIPULACIÓN Y ALMACENAMIENTO

P402 Almacenar en un lugar seco. P405 Almacenar bajo llave. P406 Almacenar en resistente al corrosivo contáiner con una línea interna resistente.

8. CONTROL DE EXPOSICIÓN/PROTECCIÓN PERSONAL

Controles de ingeniería: Proveer suficiente ventilación mecánica para mantener la exposición por debajo del límite de concentración máxima (Threshold Limit Value, TLV).

Equipo de protección personal:

Respiratorio: Si el límite de exposición en el lugar de trabajo es excedido, se aconseja el uso de un respirador de aire ante la ausencia de control ambiental.

Ojos: Use gafas protectoras o gafas con protección lateral sin perforaciones aprobadas.

Piel: Si el contacto fuera prolongado o repetido, use guantes resistentes a productos químicos.

Otros: Una estación de lavajos de emergencia o una fuente de agua potable limpia debe estar disponible en caso de contacto accidental con los ojos.

9. PROPIEDADES FÍSICAS Y QUÍMICAS

Aspecto: Claro, ámbar

Olor: Leve

Estado de agregación: Líquido
Solubilidad en agua: 100%
Contenido de VOC: 0%

Concentrarse pH: 11.2 +/- 0.5 @ 1.4:100
Diluido pH: NA
Peso específico: 1.173 - 1.190
Punto de congelación/fusión: NA / NA

10. ESTABILIDAD Y REACTIVIDAD

Estabilidad: Estable

Polimerización peligrosa: No ocurrirá.

Condiciones a evitar: Aluminio, cuero, lana, estaño y aleaciones relacionadas. Utilice través lavadora a presión o chorro de vapor.

Incompatibilidad: Los ácidos o bases fuertes podrían desactivar el producto.

Productos de descomposición peligrosos: Monóxido de carbono, Dióxido de carbono.

11. INFORMACIÓN TOXICOLÓGICA

Este producto no contiene ningún componente en 0.1% o más del que se señale como un carcinógeno humano.

<u>Componentes peligrosos</u>	<u>Número CAS</u>	<u>LD50</u>	<u>LC50</u>
Potassium Hydroxide	1310-58-3	365 mg/kg (oral rat)	179 mg/l/96 hr (flathead minnow)
Nitrito de Sodio	7632-00-0	180 mg/kg (oral rat)	7,5 ppm/48 hr (mosquito fish)
Metaborato de sodio	10555-76-7	2330 mg/kg (oral rat)	133 B/l/48 hr (daphnia magna)
Sodium Tolytriazole	64665-57-2	NE	NE
Nitrato de sodio	7631-99-4	NE	NE
Polímero De Acrílico	Acrylic Polymer (Proprietary)	NE	NE

12. INFORMACIÓN ECOLÓGICA

Este producto es tóxico para los peces.

13. SUGERENCIAS PARA SU DISPOSICIÓN FINAL

P501 Elimine el recipiente en conformidad con todas las regulaciones federales, estatales y locales relacionadas con la eliminación de residuos.

14. INFORMACIÓN SOBRE TRANSPORTE

DATOS DE EMBARQUE SEGÚN EL DOT (Ministerio de Transporte de los EE.UU.): UN1760, LÍQUIDOS CORROSIVOS, N.O.S. (Potasio-Hidroóxido), 8, II

TDG CANADIENSE: Producto no regulado. UN1760, LÍQUIDOS CORROSIVOS, N.O.S. (Potasio-Hidroóxido), 8, II

Para los envíos internacionales de Air: UN1760, LÍQUIDOS CORROSIVOS, N.O.S. (Potasio-Hidroóxido), 8, II

Para los envíos internacionales de Vessel:

15. INFORMACIÓN SOBRE REGLAMENTOS

TSCA: Todos los químicos de este producto están catalogados o están exentos de ser catalogados en el inventario químico de la Ley de Control de Sustancias Tóxicas (Toxic Substances Control Act, TSCA).

CEPA: Todos los químicos de este producto están catalogados o están exentos de ser catalogados en el DSL/NDL canadiense.

Propuesta 65:

SARA 313: Este producto no contiene productos químicos tóxicos sujetos lo siguiente a los requisitos de información del Artículo 313 de la Ley de Planeación de Emergencia y Derecho a Saber de 1986 (40CFR372): Nitrato de Sodio 7632-00-0 <2.0%

CLASIFICACIÓN HMIS: SALUD = 3 INFLAMABILIDAD = 0 REACTIVIDAD = 1 EQUIPO DE PROTECCIÓN PERSONAL = B

CLASIFICACIÓN WHMIS: Ver los riesgos identificados en la Sección 2 anterior.

16. OTRA INFORMACIÓN

NA = No disponible o No se aplica

NE = No se ha establecido

Antes de utilizar este producto, lea y obedezca todas las instrucciones y precauciones. Este producto fue formulado para utilizarse únicamente en el ámbito industrial e institucional. NO ES PARA REVENTA NI PARA USO EN EL ÁMBITO HOGAREÑO. MANTENGA FUERA DEL ALCANCE DE LOS NIÑOS. Si bien se considera que los datos contenidos en esta planilla son correctos y las opiniones expresadas son las de calificados expertos, los datos no deberán considerarse como garantía ni como declaración por las que la compañía asume responsabilidad legal alguna. Estos datos se brindan sólo para evaluación, investigación y verificación por parte del cliente. El usuario es quien deberá determinar si cualquier uso que se dé a estos datos e información está de acuerdo con las leyes y reglamentos federales, estatales y locales aplicables.

INFORMACIÓN DE SEGURIDAD Y SALUD: (216) 861-7114

Preparado Encendido: 12/28/2020

Reemplaza: 02/19/2013



Fantastik All Purpose Cleaner

Version Number: 1

Preparation date: 2014-06-11

IDENTIFICATION

Product name: Fantastik All Purpose Cleaner
Product Code: 994369, 994368, 92900504
SDS #: MS0800375
Recommended use:

- Industrial/Institutional
- Cleaning product

Uses advised against: Uses other than those identified are not recommended

Manufacturer, importer, supplier:
 US Headquarters
 Diversey, Inc.
 8310 16th St.
 Sturtevant, Wisconsin 53177-1964
 Phone: 1-888-352-2249
 MSDS Internet Address: www.diversey.com

Emergency telephone number: 1-800-851-7145 (U.S.); 1-651-917-6133 (Int'l)

HAZARD IDENTIFICATION

Classification for the undiluted product

Serious eye damage/eye irritation Category 2A



Signal Word:

Warning

Precautionary Statements

CAUSES SERIOUS EYE IRRITATION.

Avoid contact with eyes, skin and clothing. Wash affected areas thoroughly after handling. May cause irritation to mouth, throat and stomach. Wear chemical-splash goggles and chemical-resistant gloves. IF SWALLOWED: Rinse mouth. Drink a cupful of milk or water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation persists: Get medical advice/attention. Dispose of in accordance with all federal, state and local applicable regulations. SUPPLEMENTAL INFORMATION: May be mildly irritating to skin. In case of contact, immediately flush with plenty of water. If irritation occurs and persists, get medical attention.

Health hazards not otherwise classified (HHNOC) - Not applicable

Physical hazards not otherwise classified (PHNOC) - Not applicable

Classification for the diluted product @ RTU

This product is intended to be used neat.
Precautionary Statements

3. COMPOSITION/INFORMATION ON INGREDIENTS

Classified Ingredients

Ingredient(s)	CAS #	Weight %
Benzyl alcohol	100-51-6	3% - < 5%
Diethylene glycol monoethyl ether	111-90-0	1% - < 3%
Sodium xylene sulfonate	1300-72-7	1% - < 3%
Alcohol ethoxylates	68439-46-3	1% - < 3%
Sodium hydroxide	1310-73-2	> 0.1% - < 1%

*Exact percentages are being withheld as trade secret information

4. FIRST AID MEASURES

Undiluted Product:

Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation persists: Get medical advice/attention.

Skin: In case of contact, immediately flush with plenty of water. If irritation occurs and persists, get medical attention.

Inhalation: No specific first aid measures are required.

Ingestion: IF SWALLOWED: Rinse mouth. Drink a cupful of milk or water.

Most Important Symptoms/Effects: No information available.

Immediate medical attention and special treatment needed: Not applicable.

Aggravated Medical Conditions: None known.

Diluted Product:

This product is intended to be used neat.

[Redacted text]

5. FIRE FIGHTING MEASURES

Specific methods: No special methods required
Suitable extinguishing media: The product is not flammable. Extinguish fire using agent suitable for surrounding fire.
Specific hazards: Not applicable.

Special protective equipment for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Extinguishing media which must not be used for safety reasons: No information available.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Put on appropriate personal protective equipment (see Section 8.).
Environmental precautions and clean-up methods: Clean-up methods - large spillage. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Handling: Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. FOR COMMERCIAL AND INDUSTRIAL USE ONLY.

Storage: Protect from freezing. Keep tightly closed in a dry, cool and well-ventilated place. KEEP OUT OF REACH OF CHILDREN.

Aerosol Level (if applicable): Not applicable

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Exposure Guidelines:

Ingredient(s)	CAS #	ACGIH	OSHA
Benzyl alcohol	100-51-6	-	-
Diethylene glycol monoethyl ether	111-90-0	-	-
Sodium xylene sulfonate	1300-72-7	-	-
Alcohol ethoxylates	68439-46-3	-	-
Sodium hydroxide	1310-73-2	2 mg/m ³ (Ceiling)	2 mg/m ³ (TWA)

Undiluted Product:

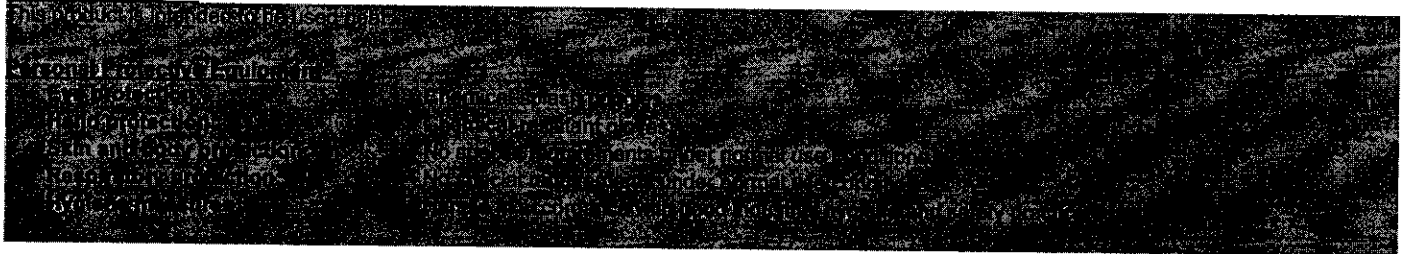
Engineering measures to reduce exposure:

No special ventilation requirements General room ventilation is adequate

Personal Protective Equipment

Eye protection:	Chemical-splash goggles.
Hand protection:	Chemical-resistant gloves.
Skin and body protection:	No special requirements under normal use conditions.
Respiratory protection:	No special requirements under normal use conditions.
Hygiene measures:	Handle in accordance with good industrial hygiene and safety practice.

Diluted Product:



9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Evaporation Rate: No information available

Odor threshold: No information available.

Melting point/range: Not determined

Autoignition temperature: No information available

Solubility in other solvents: No information available

Density: 8.43 lbs/gal 1.0108 Kg/L

Bulk density: No information available

Flash point: > 200 °F > 93.3 °C

Elemental Phosphorus: 0 % by wt.

pH: 12.2

Metal Corrosion: Not determined

Explosion limits: - upper: Not determined - lower: Not determined

Color: Clear, Purple

Odor: Fresh

Boiling point/range: Not determined

Decomposition temperature: Not determined

Solubility: Completely Soluble

Relative Density (relative to water): 1.0108

Vapor density: No information available

Vapor pressure: No information available.

Partition coefficient (n-octanol/water): No information available

Viscosity: No information available

VOC: 0.44 % *

VOC % by wt. at use dilution: 0.44 % *

Flammability (Solid or Gas): Not applicable

* - Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 8.5, Article 2, Consumer Products, Sections 94508

10. STABILITY AND REACTIVITY

Reactivity:

Not Applicable

Stability:

The product is stable

Hazardous decomposition products:

None reasonably foreseeable.

Materials to avoid:

None known.

Conditions to avoid:

No information available.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Eye contact, Skin contact, Inhalation

Delayed, immediate, or chronic effects and symptoms from short and long-term exposure

Skin contact: May be mildly irritating to skin. Symptoms may include redness and/or transient discomfort.

Eye contact: Causes serious eye irritation. Symptoms may include pain, redness, and watering.

Ingestion: May be irritating to mouth, throat and stomach. Symptoms may include stomach pain and nausea.

Inhalation: May be irritating to nose, throat, and respiratory tract. Symptoms may include coughing and difficulty breathing.

Sensitization: No known effects.

Numerical measures of toxicity

ATE - Oral (mg/kg): >5000

ATE - Dermal (mg/kg): >5000

ATE - Inhalatory, mists (mg/l): >20

2. ECOLOGICAL INFORMATION

Ecotoxicity: No information available.

Persistence and Degradability: No information available.

Bioaccumulation: No information available.

3. DISPOSAL CONSIDERATION

Waste from residues / unused products: This product, as sold, if discarded or disposed, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Dispose in compliance with all Federal, state, provincial, and local laws and regulations.

Contaminated Packaging: Do not re-use empty containers.

RCRA Hazard Class (undiluted product): Not Regulated

4. TRANSPORT INFORMATION

DOT/TDG/IMDG: Please refer to the Diversey HazMat Library, only available through Internet Explorer, <http://naextranet.diversey.com/dot/>, for up to date shipping information.

DOT (Ground) Bill of Lading Description: CLEANING, WASHING, BUFFING, OR POLISHING COMPOUNDS LIQUID

IMDG (Ocean) Bill of Lading Description: CLEANING, WASHING, BUFFING, OR POLISHING COMPOUNDS LIQUID

5. REGULATORY INFORMATION

International Inventories at CAS# Level

All components of this product are listed on the following inventories: U.S.A. (TSCA), Canada (DSL/NDSL).

U.S. Regulations

California Proposition 65: This product is not subject to the reporting requirements under California's Proposition 65.

RIGHT TO KNOW (RTK)

Ingredient(s)	CAS #	MARTK:	NJRTK:	PARTK:	RIRTK:
Water	7732-18-5	-	-	-	-
Benzyl alcohol	100-51-6	X	-	X	-
Diethylene glycol monoethyl ether	111-90-0	-	X	-	-
Sodium xylene sulfonate	1300-72-7	-	-	-	-
Alcohol ethoxylates	68439-46-3	-	-	-	-
Sodium hydroxide	1310-73-2	X	X	X	X

CERCLA/ SARA

Ingredient(s)	CAS #	Weight %	CERCLA/SARA RQ (lbs)	Section 302 TPQ (lbs)	Section 313
Diethylene glycol monoethyl ether	111-90-0	1% - < 3%			X
Sodium hydroxide	1310-73-2	> 0.1% - < 1%	1000		

Ingredient(s)	CAA HAP	CAA ODS	CWA Priority Pollutants
Diethylene glycol monoethyl ether	X		

SARA 311/312 Hazard Categories

Immediate: X
 Delayed: -
 Fire: -
 Reactivity: -
 Sudden Release of Pressure: -

Canada

16 OTHER INFORMATION

NFPA

Health 2
 Flammability 0
 Instability 0

Version Number: 1
 Preparation date: 2014-06-11

Reason for revision: Not applicable
 Prepared by: NAPRAC
 Additional advice: • Contains an added fragrance, see "Odor" heading in section 9 for specific description

Notice to Reader: This document has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied, as to the accuracy of the information contained within. Actual conditions of use and handling are beyond seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.

Safety Data Sheet

FD&C Blue #1, 0.5%

CAROLINA[®]
www.carolina.com

Section 1 Product Description

Product Name: FD&C Blue #1, 0.5%
Recommended Use: Science education applications
Synonyms: Food Coloring; Vegetable Dye
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

GHS Classification:
Acute Toxicity - Oral Category 5

Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Water	7732-18-5	99.5
FD&C Blue #1	3844-45-9	0.5

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.
Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact: After contact with skin, wash immediately with plenty of water.
Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5 Firefighting Procedures

Extinguishing Media: Use media suitable to extinguish surrounding fire.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: N/A
Hazardous Combustion Products: Sodium Oxides, Sulfur Oxides, Carbon oxides, Nitrogen oxides

Section 6 Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: No health affects expected from the clean-up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section 8 of this (M)SDS. Poses little or no immediate hazard. Isolate area. Keep unnecessary personnel away. Remove soiled clothing and launder before reuse. Absorb the liquid and scrub the area with detergent and water. Pick up wash liquid with additional absorbent and place in a disposable container. Do not flush spill to drain.

Section 7 Handling and Storage

Handling: Do not breathe dust/vapor. Do not get in eyes, on skin, or on clothing. Retained residue may make empty containers hazardous; use caution.
Storage: Keep container tightly closed in a cool, well-ventilated place.

Safety Data Sheet

Storage Code: Green - general chemical storage

Section 8 Protection Information

Chemical Name	ACGIH		OSHA PEL	
	(TWA)	(STEL)	(TWA)	(STEL)
No data available	N/A	N/A	N/A	N/A

Control Parameters

Engineering Measures:

No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

Respiratory Protection:

No respiratory protection required under normal conditions of use.

Eye Protection:

Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves:

Natural rubber, Neoprene, PVC or equivalent.

Section 9 Physical Data

Formula: Mixture	Vapor Pressure: 14 (water)
Molecular Weight: N/A	Evaporation Rate (BuAc=1): < 1
Appearance: Blue	Vapor Density (Air=1): 0.7 (water)
Odor: None	Specific Gravity: Approx. 1.0
Odor Threshold: No data available	Solubility in Water: Soluble
pH: No data available	Log Pow (calculated): No data available
Melting Point: No data available 0 C	Autoignition Temperature: No data available
Boiling Point: 100 C	Decomposition Temperature: No data available
Flash Point: No data available	Viscosity: No data available
Flammable Limits in Air: N/A N/A	Percent Volatile by Volume: 99.5%

Section 10 Reactivity Data

Reactivity:	No data available
Chemical Stability:	Stable under normal conditions.
Conditions to Avoid:	None known.
Incompatible Materials:	Water-reactive materials, Strong oxidizing agents, Strong reducing agents
Hazardous Decomposition Products:	Nitrogen oxides, Carbon oxides, Sulfur Oxides, Sodium Oxides
Hazardous Polymerization:	Will not occur

Section 11 Toxicity Data

Routes of Entry	Inhalation, ingestion, eye or skin contact.
Symptoms (Acute):	N/A
Delayed Effects:	No data available

Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Water	7732-18-5	Oral LD50 Rat 90000 mg/kg		
FD&C Blue #1	3844-45-9	Oral LD50 Rat > 2000 mg/kg		

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
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Safety Data Sheet

No data available

7732-18-5
3844-45-9

Not listed

Not listed

Not listed

Chronic Effects:

Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: No evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.

Target Organ Effects:

Acute: See Section 2
Chronic: To the best of our knowledge, the toxicological properties of this mixture have not been thoroughly evaluated.

Section 12

Ecological Data

Overview: This material is not expected to be harmful to the ecology. Keep out of waterways.
Mobility: No data
Persistence: No data
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

Chemical Name

Water

CAS Number

7732-18-5

Eco Toxicity

No data available

Section 13

Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
Waste Disposal Code(s): Not Determined

Section 14

Transport Information

Ground - DOT Proper Shipping Name:

N/A

Air - IATA Proper Shipping Name:

Not regulated for air transport by IATA.

Section 15

Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
No data available	7732-18-5 3844-45-9	No	No	No	No	No

California Prop 65:

No California Proposition 65 ingredients

Section 16

Additional Information

Safety Data Sheet

Revised: 08/21/2018

Replaces: 06/15/2018

Printed: 08-25-2018

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health

Safety Data Sheet

FD&C Green #3, 0.5%

CAROLINA[®]
www.carolina.com

Section 1 Product Description

Product Name: FD&C Green #3, 0.5%
Recommended Use: Science education applications
Synonyms: Fast Green FCF solution, Green Food Coloring, C.I. 42053
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

GHS Classification:

Other Safety Precautions: Not a dangerous substance according to GHS classification criteria.
No known OSHA hazards.

Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Water	7732-18-5	99.5
Fast Green FCF(CAS#2353-45-9) 100%	2353-45-9	0.5

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.
Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact: After contact with skin, wash immediately with plenty of water.
Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5 Firefighting Procedures

Extinguishing Media: Use media suitable to extinguish surrounding fire.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: Fire or excessive heat may produce hazardous decomposition products.
Hazardous Combustion Products: Sodium Oxides, Sulfur Oxides, Carbon oxides, Nitrogen oxides

Section 6 Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: No adverse health affects expected from the clean-up of spilled material. Remove soiled clothing and launder before reuse. Poses little or no immediate hazard
No special spill clean-up considerations. Collect and discard in regular trash.

Section 7 Handling and Storage

Handling: Do not ingest or take internally. Avoid contact with skin and eyes.
Storage: Suitable for any general chemical storage.
Storage Code: Green - general chemical storage

Safety Data Sheet

Section 8

Protection Information

Chemical Name	ACGIH		OSHA PEL	
	(TWA)	(STEL)	(TWA)	(STEL)
No data available	N/A	N/A	N/A	N/A

Control Parameters

Engineering Measures:

No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

Respiratory Protection:

No respiratory protection required under normal conditions of use.

Eye Protection:

Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves:

Natural rubber, Neoprene, PVC or equivalent.

Section 9

Physical Data

Formula: Product is a mixture.

Molecular Weight: N/A

Appearance: Green Liquid

Odor: No data available

Odor Threshold: No data available

pH: No data available

Melting Point: No data available

Boiling Point: 100 C

Flash Point: No data available

Flammable Limits in Air: N/A

Vapor Pressure: N/A

Evaporation Rate (BuAc=1): N/A

Vapor Density (Air=1): N/A

Specific Gravity: approx. 1

Solubility in Water: Soluble

Log Pow (calculated): No data available

Autoignition Temperature: No data available

Decomposition Temperature: No data available

Viscosity: 10

Percent Volatile by Volume: N/A

Section 10

Reactivity Data

Reactivity:

No data available

Chemical Stability:

Stable under normal conditions.

Conditions to Avoid:

None known.

Incompatible Materials:

Strong oxidizing agents, Water-reactive materials

Hazardous Decomposition Products:

Nitrogen oxides, Carbon oxides, Sulfur Oxides, Sodium Oxides

Hazardous Polymerization:

Will not occur

Safety Data Sheet

Section 11

Toxicity Data

Routes of Entry: Eyes and skin
Symptoms (Acute): None Known
Delayed Effects: No data available

Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Water	7732-18-5	Oral LD50 Rat 90000 mg/kg		
Fast Green FCF(CAS#2353-45-9) 100%	2353-45-9	Oral LD50 Rat > 2000 mg/kg		

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
No data available		Not listed	Not listed	Not listed

Chronic Effects:

Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: No evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.
Target Organ Effects:
Acute: See Section 2
Chronic: Not listed as a carcinogen by IARC, NTP or OSHA.

Section 12

Ecological Data

Overview: This material is not expected to be harmful to the ecology. Keep out of waterways.
Mobility: No data
Persistence: No data
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
Water	7732-18-5	No data available

Section 13

Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
Waste Disposal Code(s): Not Determined

Section 14

Transport Information

Ground - DOT Proper Shipping Name: Not regulated for transport
Air - IATA Proper Shipping Name: Not regulated for air transport by IATA.

Safety Data Sheet

Section 15

Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
No data available		No	No	No	No	No

Section 16

Additional Information

Revised: 09/03/2014

Replaces: 08/27/2014

Printed: 09-12-2014

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Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health

Safety Data Sheet

FD&C Red #40

CAROLINA[®]
www.carolina.com

Section 1 Product Description

Product Name: FD&C Red #40
Recommended Use: Science education applications
Synonyms: Allura Red AC
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

GHS Classification:

Other Safety Precautions: May cause irritation.
May cause gastrointestinal discomfort.
May cause irritation to respiratory tract.
May cause irritation to skin.

Acute Toxicity Dermal Contains 100 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Gas Contains 100 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Vapor Contains 100 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Dust/Mist Contains 100 % of the mixture consists of ingredient(s) of unknown toxicity

Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
FD&C Red #40	25956-17-6	100

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.
Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact: After contact with skin, wash immediately with plenty of water.
Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5 Firefighting Procedures

Extinguishing Media: Use media suitable to extinguish surrounding fire.
Fire Fighting Methods and Protection: N/A
Fire and/or Explosion Hazards: Avoid Dusting. May become explosive when dispersed in air.
Hazardous Combustion Products: Sodium Oxides, Sulfur Oxides, Carbon oxides, Nitrogen oxides

Section 6 Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: No adverse health affects expected from the clean-up of spilled material. Follow personal protective equipment recommendations found in Section 8 of this (M)SDS. Avoid prolonged or repeated contact with material. Avoid creating and inhaling dust. Avoid contact with skin and eyes.

Safety Data Sheet

Vacuum or sweep up material and place in a disposal container

Section 7 Handling and Storage

Handling: Do not ingest or take internally. Avoid creating and inhaling dust.
Storage: Suitable for any general chemical storage.
Storage Code: Green - general chemical storage

Section 8 Protection Information

<u>Chemical Name</u>	<u>(TWA)</u>	<u>ACGIH</u>	<u>(STEL)</u>	<u>(TWA)</u>	<u>OSHA PEL</u>	<u>(STEL)</u>
No data available	N/A		N/A	N/A		N/A

Control Parameters

Engineering Measures: No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.

Respiratory Protection: No respiratory protection required under normal conditions of use.

Eye Protection: Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves: Nitrile

Section 9 Physical Data

Formula: C18H16N2O8S2*Na2	Vapor Pressure: N/A
Molecular Weight: 498.44	Evaporation Rate (BuAc=1): N/A
Appearance: Dark Red Powder	Vapor Density (Air=1): N/A
Odor: No data available	Specific Gravity: N/A
Odor Threshold: No data available	Solubility in Water: Soluble
pH: No data available	Log Pow (calculated): No data available
Melting Point: > 300 C	Autoignition Temperature: No data available
Boiling Point: No data available	Decomposition Temperature: No data available
Flash Point: No data available	Viscosity: No data available
Flammable Limits in Air: N/A	Percent Volatile by Volume: N/A

Section 10 Reactivity Data

Reactivity: No data available

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: None known.

Incompatible Materials: Strong oxidizing agents

Hazardous Decomposition Products: Nitrogen oxides, Carbon oxides, Sulfur Oxides, Sodium Oxides

Hazardous Polymerization: May polymerize violently under heat.

Section 11 Toxicity Data

Routes of Entry: Inhalation and ingestion.

Symptoms (Acute): None Known

Delayed Effects: No data available

Acute Toxicity:				
Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
FD&C Red #40	25956-17-6	Oral LD50 Dog > 5000 mg/kg	Dermal LD50 Rabbit > 10000 mg/kg	Not determined

Carcinogenicity:				
Chemical Name	CAS Number	IARC	NTP	OSHA

Safety Data Sheet

No data available

25956-17-6

Not listed

Not listed

Not listed

Chronic Effects:

Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: No evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.

Target Organ Effects:

Acute: No data available
Chronic: Not listed as a carcinogen by IARC, NTP or OSHA.

Section 12

Ecological Data

Overview: This material is not expected to be harmful to the ecology.
Mobility: No data
Persistence: No data
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
N/A	25956-17-6	

Section 13

Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
Waste Disposal Code(s): Not Determined

Section 14

Transport Information

Ground - DOT Proper Shipping Name:	Air - IATA Proper Shipping Name:
Not regulated for transport	Not regulated for air transport by IATA.

Section 15

Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
No data available	25956-17-6	No	No	No	No	No

Section 16

Additional Information

Revised: 09/03/2014

Replaces: 08/27/2014

Printed: 09-11-2014

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Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health

Safety Data Sheet

FD&C Yellow #5

CAROLINA[®]
www.carolina.com

Section 1 Product Description

Product Name: FD&C Yellow #5
Recommended Use: Science education applications
Synonyms: Tartrazine, Acid Yellow 23, Food Yellow 4, Tartrazine Yellow
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

DANGER



May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

GHS Classification:

Respiratory Sensitisation Category 1, Skin Sensitisation Category 1

Acute Toxicity Dermal Contains	100 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Gas Contains	100 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Vapor Contains	100 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Dust/Mist Contains	100 % of the mixture consists of ingredient(s) of unknown toxicity

Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
FD&C Yellow #5	1934-21-0	100

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin Contact: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5 Firefighting Procedures

Extinguishing Media: Use media suitable to extinguish surrounding fire.

Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Fire and/or Explosion Hazards: Fire or excessive heat may produce hazardous decomposition products.

Safety Data Sheet

Hazardous Combustion Products: Sodium Oxides, Sulfur Oxides, Carbon oxides, Nitrogen oxides

Section 6 Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled:

Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Ventilate the contaminated area. Isolate area. Keep unnecessary personnel away. Avoid contact with material. Avoid creating and inhaling spray or mist. Avoid contact with skin and eyes. Absorb the liquid and scrub the area with detergent and water. Pick up wash liquid with additional absorbent and place in a disposable container. Contain the discharged material. Block any potential routes to water systems.

Section 7 Handling and Storage

Handling: Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation wear respiratory protection. Avoid creating and inhaling dust. Do not ingest or take internally. Readily absorbs moisture from air.

Storage: Suitable for any general chemical storage.

Storage Code: Green - general chemical storage

Section 8 Protection Information

<u>Chemical Name</u>	<u>ACGIH</u>	<u>OSHA PEL</u>
No data available	(TWA) N/A (STEL) N/A	(TWA) N/A (STEL) N/A

Control Parameters

Engineering Measures:

No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

Respiratory Protection:

No respiratory protection required under normal conditions of use.

Eye Protection:

Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves:

Nitrile

Section 9 Physical Data

Formula: C₁₆H₉N₄O₉S₂Na₃

Molecular Weight: 534.37 g/mol

Appearance: Orange Powder

Odor: No data available

Odor Threshold: No data available

pH: No data available

Melting Point: No data available

Boiling Point: No data available

Flash Point: No data available

Flammable Limits in Air: No data available

Vapor Pressure: N/A

Evaporation Rate (BuAc=1): N/A

Vapor Density (Air=1): N/A

Specific Gravity: N/A

Solubility in Water: Soluble

Log Pow (calculated): No data available

Autoignition Temperature: No data available

Decomposition Temperature: No data available

Viscosity: No data available

Percent Volatile by Volume: N/A

Section 10 Reactivity Data

Reactivity:

No data available

Chemical Stability:

Stable under normal conditions.

Conditions to Avoid:

None known.

Incompatible Materials:

Strong oxidizing agents

Hazardous Decomposition Products:

Nitrogen oxides, Carbon oxides, Sulfur Oxides, Sodium Oxides

Safety Data Sheet

Hazardous Polymerization: Will not occur

Section 11 Toxicity Data

Routes of Entry: Inhalation and ingestion.
Symptoms (Acute): Respiratory disorders
Delayed Effects: No data available

Acute Toxicity:	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Chemical Name FD&C Yellow #5	1934-21-0	Oral LD50 Mouse 12750 mg/kg	Not determined	Not determined

Carcinogenicity:	CAS Number	IARC	NTP	OSHA
Chemical Name No data available	1934-21-0	Not listed	Not listed	Not listed

Chronic Effects:
Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: Evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.
Target Organ Effects:
Acute: No data available
Chronic: Not listed as a carcinogen by IARC, NTP or OSHA.

Section 12 Ecological Data

Overview: This material is not expected to be harmful to the ecology. Keep out of waterways.
Mobility: No data
Persistence: No data
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
N/A	1934-21-0	

Section 13 Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
Waste Disposal Code(s): Not Determined

Section 14 Transport Information

Ground - DOT Proper Shipping Name: Not regulated for transport
Air - IATA Proper Shipping Name: Not regulated for air transport by IATA.

Section 15 Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
No data available	1934-21-0	No	No	No	No	No

Safety Data Sheet

Section 16

Additional Information

Revised: 09/03/2014

Replaces: 08/27/2014

Printed: 09-11-2014

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Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health

Safety Data Sheet
according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 01.08.2015

Ferric Nitrate 0.05M

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: Ferric Nitrate 0.05M

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: KEMFE3360-A

Recommended uses of the product and restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific, Inc.
9 Barnhart Drive
Hanover, PA 17331
1-717-632-1291

Supplier Details:

AquaPhoenix Scientific Inc.
9 Barnhart Drive, Hanover PA 17331
(717) 632-1291

Emergency telephone number:

ChemTel: (24-hour) (US and Canada)
1-(800)-255-3924

SECTION 2: Hazards identification

Classification of the substance or mixture: Not classified for physical or health hazards under GHS.

Signal word: None

Hazard statements: None

Precautionary statements:

If medical advice is needed have product container or label at hand.
Keep out of reach of children.
Read label before use.

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

Ingredients:		
CAS 7782-61-8	Ferric Nitrate	2.02 %
CAS 7732-18-5	Deionized Water	97.83 %
CAS 7697-37-2	Nitric Acid, ACS	0.15 %
Percentages are by weight		

SECTION 4: First aid measures

Description of first aid measures

Safety Data Sheet
according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 01.08.2015

Ferric Nitrate 0.05M**After inhalation:**

Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical attention if irritation or coughing persists.

After skin contact:

Wash affected area with soap and water. Immediately remove contaminated clothing and shoes. Rinse thoroughly with plenty of water for at least 15 minutes. Immediately seek medical attention.

After eye contact:

Protect unexposed eye. Flush thoroughly with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do, and continue rinsing. Continue rinsing eyes during transport to hospital.

After swallowing:

Rinse mouth thoroughly. Dilute with water or milk. Get medical assistance. Induce vomiting.

Most important symptoms and effects, both acute and delayed:

Inhalation may cause irritation to nose and upper respiratory tract, ulceration, coughing, chest tightness and shortness of breath. Higher concentrations cause tachypnoea, pulmonary oedema and suffocation. Pain, eye ulceration, conjunctival irritation, cataracts and glaucoma may occur following eye exposure. None identified.

Indication of any immediate medical attention and special treatment needed:

Provide SDS to Physician. Physician should treat symptomatically.

SECTION 5: Firefighting measures**Extinguishing media****Suitable extinguishing agents:**

Use dry chemical, foam, carbon dioxide, or mist to extinguish surrounding fire.

Unsuitable extinguishing agents:

None identified.

Special hazards arising from the substance or mixture:

None identified. Not considered to be a fire or explosion hazard.

Advice for firefighters:**Protective equipment:**

Use normal procedures. Use protective clothing. Use NIOSH approved breathing equipment.

Additional information (precautions):

Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes, and clothing.

SECTION 6: Accidental release measures**Personal precautions, protective equipment and emergency procedures:**

Ensure adequate ventilation. Ensure that air-handling systems are operational.

Environmental precautions:

Should not be released into environment. Prevent from reaching drains, sewer, or waterway.

Methods and material for containment and cleaning up:

Always obey local regulations. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Containerize for disposal. Refer to Section 13. Keep in suitable closed containers for disposal. Soak up with inert absorbent material and dispose of as hazardous waste. Cover spill with suitable absorbing agent. Mix and add water to form slurry. Wear protective eyewear, gloves, and clothing. Refer to Section 8.

Reference to other sections: None**SECTION 7: Handling and storage**

Safety Data Sheet
according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 01.08.2015

Ferric Nitrate 0.05M

Precautions for safe handling:

Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Prevent contact with skin, eyes, and clothing. Do not eat, drink, smoke, or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage. Store protected from moisture. Provide ventilation for containers. Keep container tightly closed.

SECTION 8: Exposure controls/personal protection

**Control parameters:**

7782-61-8, Ferric nitrate nonahydrate , OSHA PEL TWA 1 mg/m3.
7782-61-8 , Ferric nitrate nonahydrate , ACGIH TLV TWA 1 mg/m3.
7697-37-2 , Nitric Acid , NIOSH 4 ppm STEL; 10 mg/m3 STEL.
7697-37-2 , Nitric Acid , NIOSH 2 ppm TWA; 5 mg/m3 TWA.
7697-37-2 , Nitric Acid , ACGIH 4 ppm STEL.
7697-37-2 , Nitric Acid ACGIH, 2 ppm TWA.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of handling. Normal ventilation is adequate.

Respiratory protection:

Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

Protection of skin:

Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing.

Eye protection:

Tightly fitting safety goggles. Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

General hygienic measures:

Perform routine housekeeping. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing. Before reworking wash contaminated clothing.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Clear, colorless liquid	Explosion limit lower:	Non Explosive
		Explosion limit upper:	Non Explosive
Odor:	Odorless	Vapor pressure at 20°C:	No information available
Odor threshold:	No information available	Vapor density:	No Determined.
pH-value:	No information available	Relative density:	Approx. 1 (Water = 1)
Melting/Freezing point:	No information available	Solubilities:	Soluble.
Boiling point/Boiling range:	No information available	Partition coefficient (n-octanol/water):	Not determined

Safety Data Sheet
according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 01.08.2015

Ferric Nitrate 0.05M

Flash point (closed cup):	Not applicable	Auto/Self-ignition temperature:	Not determined
Evaporation rate:	No information available	Decomposition temperature:	Not determined
Flammability (solid, gaseous):	Not flammable	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	Approx. 1 g/cm ³ (8.345 lbs/gal) at 20 °C (68 °F)		
Hydrochloric Acid	MW is 36.46		

SECTION 10: Stability and reactivity

Reactivity:

Under normal conditions product is stable.

Chemical stability:

No decomposition if used and stored according to specifications.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

Incompatible materials.

Incompatible materials:

Strong bases, hydrogen sulfides, turpentine, metallic powders, hydrogen sulfides, wood and combustible organics.

Hazardous decomposition products:

Can emit toxic fumes of hydrogen nitrate or nitrogen oxides.

SECTION 11: Toxicological information

Acute Toxicity:

Chronic Toxicity: No additional information.

Skin corrosion/irritation:

: Irritating to skin 7782-61-8 (Ferric Nitrate).

Serious eye damage/irritation:

: Irritating to eyes. 7782-61-8 (Ferric Nitrate).

Respiratory or skin sensitization:

: None identified.

Carcinogenicity: No additional information.

Germ cell mutagenicity: No additional information.

Reproductive Toxicity: No additional information.

STOT-single and repeated exposure: No additional information.

Additional toxicological information: No additional information.

SECTION 12: Ecological information

Safety Data Sheet
according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 01.08.2015

Ferric Nitrate 0.05M

Ecotoxicity: No additional information.

Persistence and degradability:

No Information Available.

Bioaccumulative potential:

No Information Available.

Mobility in soil:

No Information Available.

Other adverse effects:

No Information Available.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification. Absorb with suitable material and containerize for disposal.

SECTION 14: Transport information

US DOT

UN Number:

ADR, ADN, DOT, IMDG, IATA

Not regulated

Limited Quantity Exception:

None

Bulk:

RQ (if applicable): None

Proper shipping Name: Not regulated.

Hazard Class: None

Packing Group: Not regulated.

Marine Pollutant (if applicable): No additional information.

Comments: None

Non Bulk:

RQ (if applicable): None

Proper shipping Name: Not regulated.

Hazard Class: None

Packing Group: Not regulated.

Marine Pollutant (if applicable): No additional information.

Comments: None

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute, Chronic

SARA Section 313 (Specific toxic chemical listings):

7782-61-8 Ferric nitrate nonahydrate.

7697-37-2 Nitric Acid.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

Safety Data Sheet
according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 01.08.2015

Ferric Nitrate 0.05M

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

7783-85-9 Ferrous Ammonium Sulfate 1000 lbs.

7697-37-2 Nitric acid 1000 lbs.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

SECTION 16: Other Information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 1-0-0

HMIS: 1-0-0

GHS Full Text Phrases: None

Abbreviations and Acronyms:

IMDG International Maritime Code for Dangerous Goods.

PNEC. Predicted No-Effect Concentration (REACH).

CFR Code of Federal Regulations (USA).

SARA Superfund Amendments and Reauthorization Act (USA).

RCRA. Resource Conservation and Recovery Act (USA).

TSCA. Toxic Substances Control Act (USA).

NPRI National Pollutant Release Inventory (Canada).

DOT US Department of Transportation.

IATA International Air Transport Association.

GHS Globally Harmonized System of Classification and Labelling of Chemicals.

ACGIH American Conference of Governmental Industrial Hygienists.

CAS Chemical Abstracts Service (division of the American Chemical Society).

Safety Data Sheet
according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 01.08.2015



NFPA National Fire Protection Association (USA).
HMIS Hazardous Materials Identification System (USA).
WHMIS Workplace Hazardous Materials Information System (Canada).
DNEL Derived No-Effect Level (REACH).

Section 1 Chemical Product and Company Identification

Page E1 of E2



**Aldon
Corporation**

221 Rochester Street
Avon, NY 14414
(585) 226-6177

CHEMTREC 24 Hour Emergency USA
Phone Number (800) 424-9300
For laboratory and industrial use only.
Not for drug, food or household use.

Product FERRIC NITRATE, 0.2 MOLAR SOLUTION

Synonyms Iron(III) Nitrate, Water Solution

Section 2 Hazards Identification

Signal word: WARNING

Pictograms: GHS07

Target organs: Blood



GHS Classification:

Acute toxicity (Category 5)

Skin irritation (Category 2)

Eye irritation (Category 2B)

GHS Label information: Hazard statement(s):

H303: May be harmful if swallowed.

H315: Causes skin irritation.

H320: Causes eye irritation.

Precautionary statement(s):

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352: IF ON SKIN: Wash with plenty of soap and water

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P332+P313: If skin irritation occurs: Get medical advice/attention.

P337+P313: If eye irritation persists: Get medical advice/attention.

P362+P364: Take off contaminated clothing and wash before reuse.

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known

Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Water	7732-18-5	91.9%	231-791-2
Ferric nitrate, nonahydrate	7782-61-8	8.1%	233-899-5 (anhydrous CAS # 10421-48-4)

Section 4 First Aid Measures

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY BE HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Use any media suitable for extinguishing supporting fire.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: In fire conditions, water may evaporate from this solution which may cause hazardous decomposition products to be formed as dust or fume.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Iron salts, soluble, as Fe	TWA: 1 mg/m ³	None	TWA: 1 mg/m ³

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Clear, yellowish liquid.	Evaporation rate (Water = 1): <1	Partition coefficient: Data not available
Odor: No odor.	Flammability (solid/gas): Data not available.	Auto-ignition temperature: Data not available
Odor threshold: Data not available.	Explosion limits: Lower / Upper: Data not available	Decomposition temperature: Data not available.
pH: Data not available.	Vapor pressure (mm Hg): 14 (water)	Viscosity: Data not available.
Melting / Freezing point: Approximately 0°C (32°F) (water)	Vapor density (Air = 1): 0.7 (water)	Molecular formula: Mixture
Boiling point: Approximately 100°C (212°F) (water)	Relative density (Specific gravity): Approximately 1.0 (water)	Molecular weight: Mixture
Flash point: Data not available	Solubility(ies): Complete in water.	

Section 10 Stability & Reactivity

Chemical stability: Stable **Hazardous polymerization:** Will not occur.

Conditions to avoid: Excessive temperatures to cause evaporation.

Incompatible materials: Aluminum, cyanides, phosphorous, stannous chloride, thiocyanate. Oxidizable materials including sulfur, organic materials and sodium hypophosphite.

Hazardous decomposition products: Nitrogen oxides.

Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: 3,250 mg/kg [Ferric nitrate]

Skin corrosion/irritation: Data not available

Serious eye damage/irritation: Data not available

Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenicity: Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Data not available

STOT-single exposure: Data not available

STOT-repeated exposure: Data not available

Aspiration hazard: Data not available

Potential health effects:

Inhalation: May be harmful if inhaled.

Ingestion: May be harmful if swallowed.

Skin: Contact with skin may cause irritation.

Eyes: Contact with eyes may cause irritation.

Signs and symptoms of exposure: To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available. Exercise appropriate procedures to minimize potential hazards.

Additional information: RTECS #: NO7175000 [Ferric nitrate]

Section 12 Ecological Information

Toxicity to fish: No data available

Toxicity to daphnia and other aquatic invertebrates: No data available

Toxicity to algae: No data available

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

PBT and vPvB assessment: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information (US DOT / CANADA TDG)

UN/NA number: Not applicable

Shipping name: Not Regulated

Hazard class: Not applicable

Packing group: Not applicable

Reportable Quantity: No

Marine pollutant: No

Exceptions: Not applicable

2016 ERG Guide # Not applicable

Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Ferric nitrate (solid)	Listed	1,000 lbs (454 kg)	D001	Listed	Not listed	This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Section 16 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Section 1 Chemical Product and Company Information

5100 West Henrietta Rd
PO Box 92912
Rochester, NY 14692-9012
Tel: (800) 962-2660

CHEMTREC 24 Hour Emergency
Phone Number (800) 424-9300
For laboratory use only.
Not for drug, food or household use.

Product FERRIC NITRATE, NONAHYDRATE

Synonyms Iron(III) Nitrate, Nonahydrate

Section 2 Hazards Identification

This substance or mixture has not been classified as hazardous according to the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals.

Signal word: WARNING

Pictograms: GHS03 / GHS07

Target organs: Blood

**GHS Classification:**

Oxidizing solid, (Category 3)

Acute toxicity (Category 5)

Skin irritation (Category 2)

Eye irritation (Category 2A)

STOT-SE (Category 3)

GHS Label information: Hazard statement(s):

H272: May intensify fire; oxidizer.

H303: May be harmful if swallowed.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

Precautionary statement(s):

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P220: Keep away from clothing and combustible or incompatible materials.

P221: Take any precaution to avoid mixing with combustibles or incompatible materials.

P261: Avoid breathing dust.

P264: Wash hands thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352: IF ON SKIN: Wash with plenty of soap and water

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P332+P313: If skin irritation occurs: Get medical advice/attention.

P337+P313: If eye irritation persists: Get medical advice/attention.

P362+P364: Take off contaminated clothing and wash before reuse.

P370+P378: In case of fire: Use dry chemical, alcohol foam, carbon dioxide or water spray for extinction.

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with all local, state and federal regulations.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Ferric nitrate, nonahydrate	7782-61-8	100%	233-899-5 (anhydrous CAS # 10421-48-4)

Section 4 First Aid Measures

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY BE HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Carbon dioxide, dry chemical, dry sand, alcohol foam.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Although not flammable, substance is a strong oxidizer which releases oxygen on heating, increasing the burning rate of any material with a flare-burning effect. It may cause re-ignition after a fire is extinguished.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling and Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Iron salts, soluble, as Fe	TWA: 1 mg/m ³	None	TWA: 1 mg/m ³

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Solid. Deliquescent, pale violet crystals	Evaporation rate (= 1): Data not available	Partition coefficient: Data not available
Odor: Slight nitric acid odor.	Flammability (solid/gas): Data not available.	Auto-ignition temperature: Data not available
Odor threshold: Data not available.	Explosion limits: Lower / Upper: Data not available	Decomposition temperature: Data not available.
pH: Data not available.	Vapor pressure (mm Hg): Data not available	Viscosity: Data not available.
Melting / Freezing point: 47.2°C (116°F)	Vapor density (Air = 1): Data not available	Molecular formula: Fe(NO ₃) ₃ ·9H ₂ O
Boiling point: Data not available	Relative density (Specific gravity): 1.68 @ 31°C	Molecular weight: 404.00
Flash point: Data not available	Solubility(ies): Soluble in water.	

Section 10 Stability & Reactivity

Chemical stability: Stable **Hazardous polymerization:** Will not occur.

Conditions to avoid: Do not heat or rub with organic matter or other oxidizable substance. e.g. sulfur, sulfides, phosphides, hypophosphites, etc.

Incompatible materials: Aluminum, cyanides, phosphorous, stannous chloride, thiocyanate. Oxidizable materials including sulfur, organic materials and sodium hypophosphite.

Hazardous decomposition products: Nitrogen oxides.

Section 11 Toxicologic Information

Acute toxicity: Oral-rat LD50: 3,250 mg/kg

Skin corrosion/irritation: Data not available

Serious eye damage/irritation: Data not available

Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenicity: Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Data not available

STOT-single exposure: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory effects.

STOT-repeated exposure: Data not available

Aspiration hazard: Data not available

Potential health effects:

Inhalation: Inhalation may cause upper respiratory tract irritation.

Ingestion: May cause burns of the mouth, throat and stomach. Acid nature of this salt may cause corrosive damage to the gastrointestinal tract.

Skin: Contact with skin may cause severe local irritation or corrosion.

Eyes: Contact with eyes can cause severe irritation or corrosion.

Signs and symptoms of exposure: See Potential health effects above.

Additional information: RTECS #: NO7175000

Section 12 Ecological Information

Toxicity to fish: No data available

Toxicity to daphnia and other aquatic invertebrates: No data available

Toxicity to algae: No data available

Persistence and degradability: No data available **Bioaccumulative potential:** No data available

Mobility in soil: No data available **PBT and vPvB assessment:** No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information


UN/NA number: UN1466 **Shipping name:** Ferric nitrate

Hazard class: 5.1 **Packing group:** III **Reportable Quantity:** 1,000 lbs (454 kg) **Marine pollutant:** No

Exceptions: Limited quantity equal to or less than 5 Kg **2012 ERG Guide #** 140

Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERCLA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Ferric nitrate	Listed	1,000 lbs (454 kg)	D001	Listed	Not listed	C 

Section 16 Additional Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 345.00

Revision Date: March 25, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Ferrous Ammonium Sulfate

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **WARNING**

Pictograms



SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, oral (Category 5). May be harmful if swallowed (H303).

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2A). Causes skin and serious eye irritation (H315+H319).

Hazard class: Specific target organ toxicity, single exposure; Respiratory tract irritation (Category 3). May cause respiratory irritation (H335). Avoid breathing dust or fumes (P261).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Ferrous ammonium sulfate, hexahydrate	7783-85-9	$\text{Fe}(\text{NH}_4)_2(\text{SO}_4)_2 \cdot 6\text{H}_2\text{O}$	392.16	
Synonym: Mohr's salt				

SECTION 4 — FIRST AID MEASURES

If exposed or concerned: Get medical advice or attention (P308+P313).

If inhaled: Remove victim to fresh air in a position comfortable for breathing (P304+P340).

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists:** Get medical advice or attention (P337+P313).

If on skin: Rinse cautiously with water for several minutes (P351).

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher.

NFPA CODE

None
established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, thiosulfates and phosphates. Store in a cool, dry place. Due to a poor shelf life, store in a Flinn Chem-Saf™ bag and then inside a Flinn Saf-Stor™ can. Keep container tightly closed (P233). Use only in a hood or well-ventilated area (P271).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271).

Exposure guidelines: TLV 1 mg/m³ (ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Pale green, crystalline powder. Odorless.

Melting point: 100 °C (decomposes)

Soluble: Water. Insoluble in alcohol.

Specific gravity: 1.865

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong acids and strong oxidizers.

Shelf life: Fair to poor, deliquescent and affected by light. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Irritant.

ORL-RAT LD₅₀: 3250 mg/kg

Chronic effects: N.A.

IHL-RAT LC₅₀: N.A.

Target organs: N.A.

SKN-RBT LD₅₀: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

Not listed.

SECTION 16 — OTHER INFORMATION

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Revision Date: March 25, 2014



SAFETY DATA SHEET

Issuing Date 15-Jan-2014

Revision Date 15-Jan-2014

Revision Number 0

GHS product identifier

Product Name Firm Grip, QDA, Tuf-Skin concentrates

Other means of identification

Product Code(s) 204034

UN-Number UN1219

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Apply to skin prior to taping, or to fingertips for improved grip

Uses advised against No information available

Supplier's details

Supplier Address
Cramer Products, Inc.
153 W. Warren
Gardner, KS 66030
TEL: 913.856.7511

Emergency telephone number

Emergency Telephone Number 913.856.7511


Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Serious Eye Damage/Eye Irritation	Category 2
Skin Sensitization	Category 1
Specific Target Organ Systemic Toxicity (Single Exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word Hazard Statements <ul style="list-style-type: none"> • Causes serious eye irritation • May cause an allergic skin reaction • May cause drowsiness or dizziness • • Highly flammable liquid and vapor. 	Danger	
		
Appearance Clear to amber	Physical State Liquid, Paste.	Odor IPA, rosin

Precautionary Statements**Prevention**

- Wear protective gloves/protective clothing/eye protection/face protection
- Wash face, hands and any exposed skin thoroughly after handling
- Avoid breathing dust/fume/gas/mist/vapors/spray
- Contaminated work clothing should not be allowed out of the workplace
- Use only outdoors or in a well-ventilated area
- Keep away from heat/sparks/open flames/hot surfaces - No smoking
- Keep container tightly closed
- Ground/bond container and receiving equipment
- Use explosion-proof electrical/ventilating/lighting/equipment
- Use only non-sparking tools
- Take precautionary measures against static discharge
- Keep cool.

General Advice

- Specific treatment (see supplemental instructions on the administration of antidotes on this label)

Eyes

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- If eye irritation persists: Get medical advice/attention.

Skin

- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
- If skin irritation or rash occurs: Get medical advice/attention
- Wash contaminated clothing before reuse.

Inhalation

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Call a POISON CENTER or doctor/physician if you feel unwell.

Fire

- In case of fire: Use CO2, dry chemical, or foam for extinction.

Storage

- Store in a well-ventilated place. Keep container tightly closed.

Disposal
 • None

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information
 No information available.



Chemical Name	CAS-No	Weight %	Trade secret
Isopropyl alcohol	67-63-0	60-100	*
Rosin	8050-09-7	10-30	*
Benzoin Tincture IPA	-	1-5	*

**The exact percentage (concentration) of composition has been withheld as a trade secret.*



Description of necessary first-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Consult a physician.

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If symptoms persist, call a physician.

Inhalation Move to fresh air. Administer oxygen if breathing is difficult and you are trained. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If symptoms persist, call a physician.

Ingestion Do NOT induce vomiting. Rinse mouth. Drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects Difficulty in breathing. Dizziness. Drowsiness. Itching. Rashes. Red eyes, Tearing.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician Treat symptomatically.



Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Explosion Data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge Yes.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Personal precautions, protective equipment and emergency procedures

Personal Precautions Remove all sources of ignition. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Use personal protective equipment. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing.

Environmental Precautions

Environmental Precautions See Section 12 for additional Ecological Information

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Soak up with inert absorbent material. Take up mechanically and collect in suitable container for disposal. Ground and bond containers when transferring material.

Precautions for safe handling

Handling Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Wear personal protective equipment. Ensure adequate ventilation. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep away from direct sunlight.

Incompatible Products Strong oxidizing agents. Acids. Acid anhydrides. Aluminum. Halogenated compounds.

Control parameters**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropyl alcohol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m ³	IDLH: 2000 ppm 10% LEL TWA: 980 mg/m ³ TWA: 400 ppm STEL: 500 ppm STEL: 1225 mg/m ³
Rosin 8050-09-7	-	(vacated) TWA: 0.1 mg/m ³ Formaldehyde	TWA: 0.1 mg/m ³ Formaldehyde

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment**Eye/Face Protection
Skin and Body Protection
Respiratory Protection**

Tightly fitting safety goggles.
 Impervious gloves. Impervious clothing.
 If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke. Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and immediately after handling the product. Provide regular cleaning of equipment, work area and clothing. Contaminated work clothing should not be allowed out of the workplace.

Information on basic physical and chemical properties

Physical State	Liquid, Paste	Appearance	Clear to amber
Odor	IPA, rosin	Odor Threshold	No information available
<u>Property</u>	<u>Values</u>	<u>Remarks/ - Method</u>	
pH	No data available	None known	
Melting Point/Range	No data available	None known	
Boiling Point/Boiling Range	No data available	None known	
Flash Point	No data available	None known	
Evaporation rate	No data available	None known	
Flammability (solid, gas)	No data available	None known	
Flammability Limits in Air			
upper flammability limit	No data available	None known	
lower flammability limit	No data available	None known	
Vapor Pressure	No data available	None known	
Vapor Density	No data available	None known	
Relative Density	No data available	None known	
Specific Gravity	No data available.	None known	
Water Solubility	Insoluble in water.	None known	
Solubility in other solvents	No data available	None known	
Partition coefficient: n-octanol/water	No data available	None known	
Autoignition Temperature	No data available	None known	
Decomposition Temperature	No data available	None known	
Viscosity	No data available	None known	
Flammable Properties	Flammable liquids		
Explosive Properties	No data available		
Oxidizing Properties	No data available		
<u>Other information</u>			
VOC Content (%)	No data available		

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents. Acids. Acid anhydrides. Aluminum. Halogenated compounds.

Hazardous decomposition productsCarbon monoxide (CO). Carbon dioxide (CO₂).**Information on likely routes of exposure**

Product Information	No acute toxicity information is available for this product. Description of possible hazardous to health effects is based on experience and/or toxicological characteristics of several ingredients
Inhalation	May cause drowsiness and dizziness.
Eye Contact	Irritating to eyes.
Skin Contact	May cause sensitization by skin contact.
Ingestion	Not an expected route of exposure. May be harmful if swallowed.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Isopropyl alcohol	= 4396 mg/kg (Rat)	12800 mg/kg (Rat) 12870 mg/kg (Rabbit)	72.6 mg/L (Rat) 4 h
Rosin	= 7600 mg/kg (Rat)	> 2500 mg/kg (Rabbit)	-

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization May cause sensitization by skin contact.
Mutagenic Effects No information available.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropyl alcohol		Group 3		X

IARC: (International Agency for Research on Cancer)

Group 3: Not Classifiable as to its Carcinogenicity to Humans

OSHA: (Occupational Safety & Health Administration)

X - Present

Reproductive Toxicity No information available.
STOT - single exposure May cause drowsiness or dizziness
STOT - repeated exposure No information available.
Aspiration Hazard No information available.

Numerical measures of toxicity - Product*The following values are calculated based on chapter 3.1 of the GHS document:*

LD50 Oral 4944 mg/kg; Acute toxicity estimate

LD50 Dermal 2501 mg/kg; Acute toxicity estimate

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Isopropyl alcohol 67-63-0	EC50 96 h: > 1000 mg/L (Desmodesmus subspicatus) EC50 72 h: > 1000 mg/L (Desmodesmus subspicatus)	LC50 96 h: = 11130 mg/L static (Pimephales promelas) LC50 96 h: = 9640 mg/L flow-through (Pimephales promelas) LC50 96 h: > 1400000 µg/L (Lepomis macrochirus)		EC50 48 h: = 13299 mg/L (Daphnia magna)
Rosin 8050-09-7	EC50 72 h: = 400 mg/L (Desmodesmus subspicatus)		EC50 = 31.5 mg/L 30 min	EC50 48 h: 3.8 - 5.4 mg/L (Daphnia magna)

Persistence and Degradability No information available.

Bioaccumulation No information available.

Chemical Name	Log Pow
Isopropyl alcohol	0.05

Other Adverse Effects

No information available.

Waste Disposal Methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

Contaminated Packaging Do not re-use empty containers.

US EPA Waste Number D001

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste
Isopropyl alcohol	Toxic Ignitable

Note: Product may be shipped as a Limited Quantity - DOT Ground.

DOT

UN-Number UN1219
 Proper shipping name Isopropanol
 Hazard Class 3
 Packing Group II
 Description UN1219, Isopropanol, 3, II

TDG

UN-Number UN1219
 Proper Shipping Name Isopropanol
 Hazard Class 3
 Packing Group II
 Description UN1219, Isopropanol, 3, II

International Inventories

TSCA Exempt
 DSL Exempt

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Isopropyl alcohol	67-63-0	60-100	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
 Chronic Health Hazard Yes
 Fire Hazard Yes
 Sudden Release of Pressure Hazard No
 Reactive Hazard No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Isopropyl alcohol	X	X	X		X
Rosin			X		X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

<u>NFPA</u>	Health Hazard 2	Flammability 4	Instability 0	Physical and Chemical Hazards -
<u>HMIS</u>	Health Hazard 2	Flammability 4	Physical Hazard 0	Personal Protection X

Prepared By Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Issuing Date 15-Jan-2014
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Revision Note Initial Release.

General Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Flash UHS Burnishing Creme
Product code : 155-1501

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Floor cleaning (liquids)

1.3. Details of the supplier of the safety data sheet

American Cleaning Solutions
39-30 Review Avenue
Long Island City, NY 11101
T (718) 392-8080

1.4. Emergency telephone number

Emergency number : INFOTRAC: 800-535-5053

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Skin Sens. 1 H317 - May cause an allergic skin reaction

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : H317 - May cause an allergic skin reaction
Precautionary statements (GHS-US) : P261 - Avoid breathing dust/mist/spray
P272 - Contaminated work clothing must not be allowed out of the workplace
P280 - Wear protective gloves/eye protection/face protection
P302+P352 - If on skin: Wash with plenty of soap and water
P321 - Specific treatment (see First aid measures on this label)
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P501 - Dispose of contents/container in accordance with local/regional/national/international regulations

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

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Name	Product identifier	%	Classification (GHS-US)
(+)-limonene	(CAS No) 5989-27-5	1 - 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317
Diethylene Glycol Monoethyl Ether	(CAS No) 111-90-0	1 - 5	Eye Irrit. 2A, H319

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see First aid measures on this label). Wash contaminated clothing before reuse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause an allergic skin reaction.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Avoid breathing dust/mist/spray.

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Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from heat, hot surfaces, sparks, open flame and other ignition sources. No smoking. Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves/eye protection/face protection protective gloves.

Eye protection : Chemical goggles or safety glasses.

Respiratory protection : Wear appropriate mask.

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Color : milky

Odor : Citrus fruits

Odor threshold : No data available

pH : 7 - 8

Melting point : No data available

Freezing point : No data available

Boiling point : 212 - 220 °F

Flash point : ≥ 200 °F

Relative evaporation rate (butyl acetate=1) : No data available

Flammability (solid, gas) : No data available

Explosion limits : No data available

Explosive properties : No data available

Oxidizing properties : No data available

Vapor pressure : No data available

Relative density : 1.0029

Relative vapor density at 20 °C : Same as water

Solubility : Miscible with water.
Water: Solubility in water of component(s) of the mixture :
•: •: •: •: •: > 1000 g/l

Log Pow : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions. Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

(+)-limonene (5989-27-5)	
LD50 oral rat	4400 mg/kg body weight (Rat; OECD 423: Acute Oral Toxicity – Acute Toxic Class Method; Literature study; > 2000 mg/kg bodyweight; Rat; Read-across)
LD50 dermal rabbit	> 5000 mg/kg body weight (Rabbit; Weight of evidence; Equivalent or similar to OECD 402)
ATE US (oral)	4400.000 mg/kg body weight

Diethylene Glycol Monoethyl Ether (111-90-0)	
LD50 oral rat	5445 mg/kg (Rat)
LD50 dermal rat	5940 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	> 5.2 mg/l/4h (Rat)
ATE US (oral)	5445.000 mg/kg body weight
ATE US (dermal)	5940.000 mg/kg body weight

Skin corrosion/irritation : Not classified
pH: 7 - 8

Serious eye damage/irritation : Not classified
pH: 7 - 8

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

(+)-limonene (5989-27-5)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation : May cause an allergic skin reaction.

SECTION 12: Ecological information

12.1. Toxicity

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(+)-limonene (5989-27-5)	
LC50 fish 1	720 µg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Pimephales promelas; Flow-through system; Fresh water; Experimental value)
EC50 Daphnia 1	0.36 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
Threshold limit algae 1	150 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Desmodesmus subspicatus; Static system; Fresh water; Read-across)

Diethylene Glycol Monoethyl Ether (111-90-0)

LC50 fish 1	12900 mg/l (LC50; 96 h; Salmo gairdneri)
EC50 Daphnia 1	3940 mg/l (EC50; 48 h)

12.2. Persistence and degradability

Flash UHS Burnishing Creme

Persistence and degradability	Not established.
-------------------------------	------------------

(+)-limonene (5989-27-5)

Persistence and degradability	Readily biodegradable in water. Forming sediments in water. Adsorbs into the soil.
ThOD	3.29 g O ₂ /g substance

Diethylene Glycol Monoethyl Ether (111-90-0)

Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.20 g O ₂ /g substance
Chemical oxygen demand (COD)	1.85 g O ₂ /g substance
ThOD	1.9078849 g O ₂ /g substance
BOD (% of ThOD)	0.11

12.3. Bioaccumulative potential

Flash UHS Burnishing Creme

Bioaccumulative potential	Not established.
---------------------------	------------------

(+)-limonene (5989-27-5)

BCF fish 1	864.8 - 1022 (BCF; Pisces)
Log Pow	4.38 (Experimental value; OECD 117: Partition Coefficient (n-octanol/water), HPLC method; 37 °C)
Bioaccumulative potential	Potential for bioaccumulation (4 ≥ Log Kow ≤ 5).

Diethylene Glycol Monoethyl Ether (111-90-0)

Log Pow	-1.19 - -0.08
Bioaccumulative potential	Bioaccumulation: not applicable.

12.4. Mobility in soil

(+)-limonene (5989-27-5)

Log Koc	Koc,SRC PCKOCWIN v2.0; 1120 - 6324; QSAR
---------	--

Diethylene Glycol Monoethyl Ether (111-90-0)

Surface tension	0.032 N/m (25 °C)
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12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container in accordance with local/regional/national/international regulations.

Ecology - waste materials : Avoid release to the environment.

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SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT
Not regulated for transport

TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

(+)-limonene (5989-27-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Diethylene Glycol Monoethyl Ether (111-90-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

Revision date : 04/15/2015

Other information : None.

Full text of H-phrases:

Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 3	Flammable liquids Category 3
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
H226	Flammable liquid and vapor
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation

HMIS III Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal Protection : B

B - Safety glasses, Gloves

SDS US (GHS HazCom 2012)

Flash UHS Burnishing Creme

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product



SAFETY DATA SHEET

1. Identification

Product identifier Fullsparkle Spray Polish

Other means of identification

Product code 91730

Recommended use Furniture Maintenance

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Fuller Commercial Products

Address One Fuller Way
Great Bend, KS 67530
United States

Telephone Customer Service (800) 810-4829

E-mail Not available.

Emergency phone number CHEMTREC (800) 424-9300
Emergency (620) 792-1711
24 hour Emergency (800) 424-9300

2. Hazard(s) identification

Physical hazards Gases under pressure Compressed gas

Health hazards Not classified.

Environmental hazards Hazardous to the aquatic environment, acute hazard Category 3

Hazardous to the aquatic environment, long-term hazard Category 3

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Contains gas under pressure; may explode if heated. Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention Avoid release to the environment.

Response If exposed or concerned: Get medical advice/attention.

Storage Protect from sunlight. Store in a well-ventilated place.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information 11.67% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 11.67% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
ISOBUTANE		75-28-5	3 - < 5

Chemical name	Common name and synonyms	CAS number	%
DIMETHICONE		63148-62-9	1 - < 3
Other components below reportable levels			90 - 100

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	If symptoms develop move victim to fresh air. Get medical attention if symptoms persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	In the unlikely event of swallowing contact a physician or poison control center.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Contents under pressure.
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Fire-fighting equipment/instructions	In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Refer to attached safety data sheets and/or instructions for use. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.
Environmental precautions	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Ground and bond containers when transferring material. Do not re-use empty containers. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid release to the environment. Do not empty into drains.
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Conditions for safe storage, including any incompatibilities

Level 1 Aerosol.

Contents under pressure. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Store in a well-ventilated place. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
ISOBUTANE (CAS 75-28-5)	STEL	1000 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
ISOBUTANE (CAS 75-28-5)	TWA	1900 mg/m ³ 800 ppm

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear suitable protective clothing.

Respiratory protection If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Viscous Liquid
Physical state	Liquid.
Form	Aerosol. Compressed gas. Emulsion
Color	White.
Odor	Matches to Standard
Odor threshold	Not available.
pH	6
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.

Vapor pressure	4184.84 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	5.70 lbs/gal estimated
Flame extension	0 in
Flammability (flash back)	0 in
Heat of combustion (NFPA 30B)	4 kJ/g estimated
Percent volatile	95.9 % estimated
Specific gravity	0.68 estimated
VOC (Weight %)	9.5 % estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Concentration of product is an aspiration hazard that can be harmful or fatal if swallowed and enters airways. However, due to the form and method of deliverance of product, ingestion is not a primary route of exposure.
Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity Not available.

Product	Species	Test Results
Fullsparkle Spray Polish (CAS Mixture)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	33670.0352 ml/kg estimated
<i>Inhalation</i>		
LC50	Mouse	1238.0952 mg/l, 1 Hours estimated
	Rat	5789.4736 mg/l, 4 Hours estimated
<i>Oral</i>		
LD50	Rat	89473.6875 mg/kg estimated

Product	Species	Test Results
		24915.8242 ml/kg estimated

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Not available.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	
Not listed.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not available.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

Product	Species	Test Results
Fullsparkle Spray Polish (CAS Mixture)		
Aquatic		
Crustacea	EC50 Daphnia	79754.3828 mg/l, 48 hours estimated
Fish	LC50 Fish	760.2296 mg/l, 96 hours estimated

* Estimates for product may be based on additional component data not shown.

Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Partition coefficient n-octanol / water (log Kow)	
ISOBUTANE	2.76
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

14. Transport information

DOT

UN number	ID8000
UN proper shipping name	Consumer commodity
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Label(s)	9
Packing group	Not applicable.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Packaging exceptions	167
Packaging non bulk	167
Packaging bulk	None

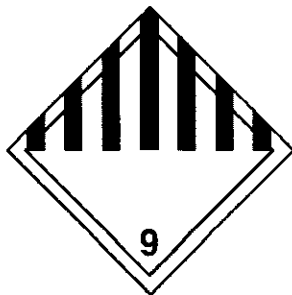
IATA

UN number	ID8000
UN proper shipping name	Consumer commodity
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Packing group	Not applicable.
Environmental hazards	No.
ERG Code	9L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.

IMDG

UN number	ID8000
UN proper shipping name	Consumer commodity
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Label(s)	9
Packing group	Not applicable.
Environmental hazards	
Marine pollutant	No.
EmS	Not available.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	This substance/mixture is not intended to be transported in bulk.

DOT; IATA; IMDG



15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are listed or exempted from listing on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

ISOBUTANE (CAS 75-28-5) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - Yes
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

ISOBUTANE (CAS 75-28-5)

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

ISOBUTANE (CAS 75-28-5)

US. New Jersey Worker and Community Right-to-Know Act

ISOBUTANE (CAS 75-28-5)

US. Pennsylvania Worker and Community Right-to-Know Law

ISOBUTANE (CAS 75-28-5)

US. Rhode Island RTK

ISOBUTANE (CAS 75-28-5)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

16. Other information, including date of preparation or last revision

Issue date 12-08-2014

Version # 01

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.