

1. Identification

Product identifier SPRAY CLEAN HD

Other means of identification

SDS number 502N37A

Product code HIL88820

Recommended use General Cleaner

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Manufacturer

Company name HILLYARD INDUSTRIES

Address 302 North Fourth St.
 St. Joseph, MO 64501

Contact person Regulatory Affairs

Telephone number (816) 233-1321 (Ext. 8285)

Fax (816) 383-8485

E-mail regulatoryaffairs@hillyard.com

Emergency telephone # (800) 424-9300

(Only in the event of chemical emergency involving a spill, leak, fire, exposure or accident involving chemicals)

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Skin corrosion/irritation Category 2
 Serious eye damage/eye irritation Category 1

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

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Causes skin irritation. Causes serious eye damage. Harmful to aquatic life.

Precautionary statement

Prevention Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves. Wear eye/face protection.

Response If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Storage Store away from incompatible materials.

Disposal Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law in compliance with applicable federal, state and local requirements.

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

Supplemental information % of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. Use With Adequate Ventilation. Avoid breathing vapors or spray mist. Open windows and doors, use exhaust fans or other means to insure fresh air entry during application and drying. Do not take internally.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
2-Methoxymethylethoxypropan ol [DPM]		34590-94-8	10 - < 20
1-Butoxy-2-propanol		5131-66-8	5 - < 10
Alcohols, C9-11, ethoxylated		68439-46-3	5 - < 10
Ethanol, 2-amino-		141-43-5	3 - < 5
Tetrasodium ethylenediamine tetraacetate		64-02-8	1 - < 3
Other components below reportable levels			60 - < 70

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

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
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	Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. 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.
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Methods and materials for containment and cleaning up

This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. 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.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. Handling and storage

Precautions for safe handling

Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
2-Methoxymethylethoxypropanol [DPM] (CAS 34590-94-8)	PEL	600 mg/m3
Ethanol, 2-amino- (CAS 141-43-5)	PEL	100 ppm 6 mg/m3
		3 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
2-Methoxymethylethoxypropanol [DPM] (CAS 34590-94-8)	STEL	150 ppm
Ethanol, 2-amino- (CAS 141-43-5)	TWA	100 ppm
	STEL	6 ppm
	TWA	3 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
2-Methoxymethylethoxypropanol [DPM] (CAS 34590-94-8)	STEL	900 mg/m3
	TWA	150 ppm 600 mg/m3 100 ppm
	STEL	15 mg/m3
Ethanol, 2-amino- (CAS 141-43-5)	TWA	6 ppm 8 mg/m3 3 ppm

Biological limit values

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

Exposure guidelines

US - California OELs: Skin designation

2-Methoxymethylethoxypropanol [DPM]
(CAS 34590-94-8) Can be absorbed through the skin.

US - Tennessee OELs: Skin designation

2-Methoxymethylethoxypropan ol [DPM] Can be absorbed through the skin.
(CAS 34590-94-8)

US ACGIH Threshold Limit Values: Skin designation

2-Methoxymethylethoxypropan ol [DPM] Can be absorbed through the skin.
(CAS 34590-94-8)

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

2-Methoxymethylethoxypropan ol [DPM] Can be absorbed through the skin.
(CAS 34590-94-8)

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

2-Methoxymethylethoxypropan ol [DPM] Can be absorbed through the skin.
(CAS 34590-94-8)

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. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical safety goggles when working with concentrate.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear suitable protective clothing.

Respiratory protection Not normally required with adequate ventilation.

Thermal hazards None known.

General hygiene considerations

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 Clear, dark purple liquid

Physical state Liquid.

Form Liquid.

Color Dark purple

Odor Mountain berry odor

Odor threshold Not available

pH 12 - 13 Concentrate

Melting point/freezing point Not applicable / Not available

Initial boiling point and boiling range 207 °F (97.22 °C)

Flash point > 207.0 °F (> 97.2 °C) Tag Closed Cup

Evaporation rate < 1 (ethyl ether = 1)

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 17.4 mm Hg

Vapor density 0.87 Air =1

Relative density 1.01 g/cm³ at 77°F

Solubility(ies)

Solubility (water) Complete

Partition coefficient (n-octanol/water) Not available

Auto-ignition temperature Not available

Decomposition temperature Not available

Viscosity Not available.

Other information

Density	8.41 lb/gal
Flammability class	Combustible IIIB estimated
Percent volatile	90.5 - 91.5 %
VOC (Weight %)	3 % Diluted 1:10 32.96 % Concentrate

10. Stability and reactivity

Reactivity	Reacts violently with strong acids. This product may react with oxidizing agents.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid temperatures exceeding the flash point. Do not mix with other chemicals. Contact with incompatible materials.
Incompatible materials	Acids. Strong oxidizing agents. Oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information**Information on likely routes of exposure**

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.

Prolonged or repeated exposure may cause liver and kidney damage. These effects have not been observed in humans.

Eye contact Causes serious eye damage.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain.

Information on toxicological effects**Acute toxicity**

Product	Species	Test Results
SPRAY CLEAN HD		
Acute		
<i>Dermal</i>		
LD50	Rabbit	95200 ml/kg estimated 20207.2969 mg/kg estimated
<i>Inhalation</i>		
LC50	Mouse	5830.9858 mg/l, 4 Hours estimated 5633.8027 mg/l, 2 Hours estimated
	Rat	11549.2959 mg/l, 0.5 Hours estimated 6760.5635 mg/l, 4 Hours estimated
<i>Oral</i>		
LD50	Guinea pig	12382.209 mg/kg estimated
	Mouse	13229.4063 mg/kg estimated
	Rabbit	1093.4783 g/kg estimated
	Rat	136.3636 ml/kg estimated 75.3563 g/kg estimated

Components	Species	Test Results
2-Methoxymethylethoxypropan ol [DPM] (CAS 34590-94-8)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	9.5 g/kg
<i>Oral</i>		
LD50	Rat	5.4 ml/kg 5.35 g/kg
Ethanol, 2-amino- (CAS 141-43-5)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	1025 mg/kg
<i>Oral</i>		
LD50	Guinea pig	620 mg/kg
	Mouse	700 mg/kg
	Rat	10.2 g/kg

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

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

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.

US. 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 Prolonged inhalation may be harmful.

Chronic effects May be harmful if absorbed through skin. Prolonged inhalation may be harmful.

Prolonged or repeated exposure may cause liver and kidney damage. These effects have not been observed in humans.

12. Ecological information

Ecotoxicity Harmful to aquatic life.

Product	Species	Test Results
SPRAY CLEAN HD		
Aquatic		
Crustacea	EC50 Daphnia	90.15 mg/l, 48 hours estimated
Fish	LC50 Fish	115.5992 mg/l, 96 hours estimated
Components	Species	Test Results
Alcohols, C9-11, ethoxylated (CAS 68439-46-3)		
Aquatic		
Crustacea	EC50 Water flea (Daphnia magna)	2.9 - 8.5 mg/l, 48 hours

Components	Species	Test Results
Fish	LC50	Fathead minnow (Pimephales promelas) 6 - 12 mg/l, 96 hours
Ethanol, 2-amino- (CAS 141-43-5)		
Aquatic		
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 114 - 196 mg/l, 96 hours

* 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

Partition coefficient n-octanol / water (log Kow)

Ethanol, 2-amino- -1.31

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 Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. 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. Waste from normal product use may be sewered to a public owned treatment works (POTW) in compliance with applicable Federal, State, and local pretreatment requirements.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Triple rinse (or equivalent). Then offer clean, dry container for recycling or reconditioning.

14. Transport information

DOT

Not regulated as dangerous goods.

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 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)

Not listed.

SARA 304 Emergency release notification

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
 Delayed Hazard - No
 Fire Hazard - No
 Pressure Hazard - No
 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**Safe Drinking Water Act (SDWA)** Not regulated.**US state regulations****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

US. Massachusetts RTK - Substance List2-Methoxymethylethoxypropan ol [DPM]
(CAS 34590-94-8)
Ethanol, 2-amino- (CAS 141-43-5)**US. New Jersey Worker and Community Right-to-Know Act**2-Methoxymethylethoxypropan ol [DPM]
(CAS 34590-94-8)
Ethanol, 2-amino- (CAS 141-43-5)**US. Pennsylvania Worker and Community Right-to-Know Law**2-Methoxymethylethoxypropan ol [DPM]
(CAS 34590-94-8)
Ethanol, 2-amino- (CAS 141-43-5)**US. Rhode Island RTK**

Not regulated.

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.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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

Issue date	01-19-2015
Revision date	03-02-2016
Version #	02
HMIS® ratings	Health: 3 Flammability: 0 Physical hazard: 0

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Revision Information Product and Company Identification: Product and Company Identification
Composition / Information on Ingredients: Disclosure Overrides
Physical & Chemical Properties: Multiple Properties
Physical and chemical properties: Appearance
Toxicological Information: Toxicological Data
GHS: Classification