

**1. Identification**

**Product identifier** Spray Clean HD

**Other means of identification**

**SDS number** 576N-138A

**Product code** HIL01820

**Recommended use** General Cleaner

**Recommended restrictions** For Labeled Use Only  
 Do not use on or near uncured painted surfaces; vapors of the cleaner may cause discoloration.  
 Do not use on aluminum or copper.

**Manufacturer/Importer/Supplier/Distributor information**

**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**

Acute toxicity, oral	Category 5
Skin corrosion/irritation	Category 1C
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation

**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** Danger

**Hazard statement** May be harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation. Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

**Precautionary statement**

**Prevention** Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

<b>Response</b>	If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. 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. Wash contaminated clothing before reuse.
<b>Storage</b>	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
<b>Disposal</b>	Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law. Waste from normal use may be sewer to a public-owned treatment works in compliance with applicable federal, state and local requirements. CONTAINER DISPOSAL: Triple rinse (or equivalent), then offer clean, dry container for recycling or reconditioning.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
2-(2-ethoxyethoxy)ethanol		111-90-0	20 - < 30
Alcohols, C9-11, Ethoxylated		68439-46-3	5 - < 10
Ethanol, 2-amino-		141-43-5	5 - < 10
1-Butoxy-2-propanol		5131-66-8	3 - < 5
Tetrasodium ethylenediamine tetraacetate		64-02-8	3 - < 5
Propanol, 2-		67-63-0	1 - < 3
Other components below reportable levels			50 - < 60

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

### 4. First-aid measures

<b>Inhalation</b>	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.
<b>Skin contact</b>	Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
<b>Ingestion</b>	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
<b>Most important symptoms/effects, acute and delayed</b>	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	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 breathe mist or vapor. 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** Use water spray to reduce vapors or divert vapor cloud drift. Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. 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. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

**Precautions for safe handling** Do not get in eyes, on skin, or on clothing. Do not breathe vapors or spray mist. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities** Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

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

Components	Type	Value
Ethanol, 2-amino- (CAS 141-43-5)	PEL	6 mg/m3
		3 ppm
Propanol, 2- (CAS 67-63-0)	PEL	980 mg/m3
		400 ppm

#### US. ACGIH Threshold Limit Values

Components	Type	Value
Ethanol, 2-amino- (CAS 141-43-5)	STEL	6 ppm
	TWA	3 ppm
Propanol, 2- (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Ethanol, 2-amino- (CAS 141-43-5)	STEL	15 mg/m3
		6 ppm
	TWA	8 mg/m3
Propanol, 2- (CAS 67-63-0)		3 ppm
	STEL	1225 mg/m3
	TWA	500 ppm
		980 mg/m3

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value
		400 ppm

**US. Workplace Environmental Exposure Level (WEEL) Guides**

Components	Type	Value
2-(2-ethoxyethoxy)ethanol (CAS 111-90-0)	TWA	140 mg/m3
		25 ppm

**Biological limit values****ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Propanol, 2- (CAS 67-63-0)	40 mg/l	Acetone	Urine	*

\* - For sampling details, please see the source document.

**Appropriate engineering controls**

Good general ventilation 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** Avoid contact with eyes. Chemical safety goggles when working with concentrate.

**Skin protection**

**Hand protection** Use protective gloves when dealing with the concentrate.

**Other** If contact is likely, wear protective clothing appropriate to use conditions.

**Respiratory protection**

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

**Thermal hazards**

None known.

**General hygiene considerations**

Keep away from food and drink. 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**

Black liquid

**Physical state**

Liquid.

**Form**

Liquid.

**Color**

Black

**Odor**

Berry odor

**Odor threshold**

Not available.

**pH**

12.00 - 13.00

**Melting point/freezing point**

Not applicable / Not available

**Initial boiling point and boiling range**

213 °F (100.56 °C)

**Flash point**

> 200.0 °F (> 93.3 °C) Tag Closed Cup

**Evaporation rate**

< 1 Ethyl ether=1

**Flammability (solid, gas)**

Not applicable.

**Upper/lower flammability or explosive limits**

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

**Vapor pressure**

15.87 mm Hg

**Vapor density**

1.878 Air=1

**Relative density**

1.023 at 77°F

**Solubility(ies)**

**Solubility (water)** 100 %

<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Density</b>	8.52 lb/gal
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.
<b>Percent volatile</b>	85 - 86 %
<b>VOC</b>	35.54 % EPA VOC 10.54 % CARB VOC

## 10. Stability and reactivity

<b>Reactivity</b>	Reacts violently with strong acids. This product may react with oxidizing agents.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials. Do not mix with other chemicals.
<b>Incompatible materials</b>	Strong acids. Strong oxidizing agents. Oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
<b>Skin contact</b>	Causes severe skin burns.

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** Causes digestive tract burns. May be harmful if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics** Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

### Information on toxicological effects

**Acute toxicity** In high concentrations, vapors are anesthetic and may cause headache, fatigue, dizziness and central nervous system effects. May be harmful if swallowed. May cause respiratory irritation.

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
2-(2-ethoxyethoxy)ethanol (CAS 111-90-0)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	6000 mg/kg
Ethanol, 2-amino- (CAS 141-43-5)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	10.2 g/kg
Propanol, 2- (CAS 67-63-0)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	12800 mg/kg

Components	Species	Test Results
Tetrasodium ethylenediamine tetraacetate (CAS 64-02-8)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 2000 mg/kg
<b>Skin corrosion/irritation</b>	Causes severe skin burns and eye damage.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.	
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.	
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
<b>Carcinogenicity</b>	Not classifiable as to carcinogenicity to humans.	
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
Not listed.		
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)</b>		
Not regulated.		
<b>US. National Toxicology Program (NTP) Report on Carcinogens</b>		
Not listed.		
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.	
<b>Specific target organ toxicity - single exposure</b>	May cause respiratory irritation.	
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.	
<b>Aspiration hazard</b>	Not an aspiration hazard.	
<b>Chronic effects</b>	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

Product	Species	Test Results	
Ecotoxicity Harmful to aquatic life with long lasting effects.			
Spray Clean HD			
<b>Aquatic</b>			
Crustacea	EC50	Daphnia	62.4314 mg/l, 48 hours estimated
Fish	LC50	Fish	84.4006 mg/l, 96 hours estimated
<b>Components</b>			
2-(2-ethoxyethoxy)ethanol (CAS 111-90-0)			
<b>Aquatic</b>			
Fish	LC50	Bluegill (Lepomis macrochirus)	> 10000 mg/l, 96 hours
Alcohols, C9-11, Ethoxylated (CAS 68439-46-3)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	2.9 - 8.5 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	6 - 12 mg/l, 96 hours
Ethanol, 2-amino- (CAS 141-43-5)			
<b>Aquatic</b>			
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)	114 - 196 mg/l, 96 hours

Components	Species	Test Results
Propanol, 2- (CAS 67-63-0)		
<b>Aquatic</b>		
Fish	LC50	Bluegill (Lepomis macrochirus) > 1400 mg/l, 96 hours
Tetrasodium ethylenediamine tetraacetate (CAS 64-02-8)		
<b>Aquatic</b>		
Fish	LC50	Bluegill (Lepomis macrochirus) 472 - 500 mg/l, 96 hours

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential**

Partition coefficient n-octanol / water (log Kow)	
2-(2-ethoxyethoxy)ethanol	-0.54
Ethanol, 2-amino-	-1.31
Propanol, 2-	0.05

**Mobility in soil** No data available.

**Other adverse effects** The product contains volatile organic compounds which have a photochemical ozone creation potential.

**13. Disposal considerations**

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. 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. Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]  
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** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Triple rinse (or equivalent). Then offer clean, dry container for recycling or reconditioning.

**14. Transport information**

**DOT**

<b>UN number</b>	UN1760
<b>UN proper shipping name</b>	CORROSIVE LIQUID, N.O.S. (ETHANOLAMINE, TETRA-SODIUM EDTA)
<b>Transport hazard class(es)</b>	
<b>Class</b>	8
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	8
<b>Packing group</b>	III
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	IB3, T7, TP1, TP28
<b>Packaging exceptions</b>	154
<b>Packaging non bulk</b>	203
<b>Packaging bulk</b>	241
<b>ERG number</b>	154

PACKAGES 1 GALLON AND SMALLER ARE SHIPPED LIMITED QUANTITY OR ORM-D

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

**General information**

This material is regulated under IATA and IMDG regulations. Contact manufacturer for shipping instructions.

**15. Regulatory information****US federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**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.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical**

Yes

**Classified hazard categories**

Acute toxicity (any route of exposure)  
Skin corrosion or irritation  
Serious eye damage or eye irritation  
Specific target organ toxicity (single or repeated exposure)

**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)**

Not regulated.

**Safe Drinking Water Act (SDWA)**

Not regulated.

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Propanol, 2- (CAS 67-63-0)

Low priority

**US state regulations****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. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

Propanol, 2- (CAS 67-63-0)

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No



<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
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** 09-25-2015

**Revision date** 08-01-2019

**Version #** 02

**HMIS® ratings** Health: 3  
Flammability: 0  
Physical hazard: 0

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**Revision information** This document has undergone significant changes and should be reviewed in its entirety.