

SAFETY DATA SHEET

1. Identification

Product identifier SPRAY CLEAN HD

Other means of identification

SDS number 502N37A
Product code HIL00820
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 Category 3

hazard

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.

Material name: SPRAY CLEAN HD

% 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 le	vels		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.

Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get Skin contact

medical advice/attention. Wash contaminated clothing before reuse.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact

present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

and pain.

Most important symptoms/effects, acute and

delayed

Indication of immediate medical attention and special

Provide general supportive measures and treat symptomatically. Keep victim under observation.

vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred

Symptoms may be delayed. treatment needed

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

Unsuitable extinguishing media

Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).

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).

Value

8. Exposure controls/personal protection

Occupational exposure limits

Components	Туре	Value	
2-Methoxymethylethoxyprop an ol [DPM] (CAS 34590-94-8)	PEL	600 mg/m3	
(100 ppm	
Ethanol, 2-amino- (CAS 141-43-5)	PEL	6 mg/m3	
		3 ppm	
US. ACGIH Threshold Limit Values	.		
Components	Туре	Value	
2-Methoxymethylethoxyprop an ol [DPM] (CAS 34590-94-8)	STEL	150 ppm	
,	TWA	100 ppm	
Ethanol, 2-amino- (CAS 141-43-5)	STEL	6 ppm	
,	TWA	3 ppm	
US. NIOSH: Pocket Guide to Chem	ical Hazards		
Components	Туре	Value	
2-Methoxymethylethoxyprop an ol [DPM] (CAS 34590-94-8)	STEL	900 mg/m3	
		150 ppm	
	TWA	600 mg/m3	
		100 ppm	
Ethanol, 2-amino- (CAS 141-43-5)	STEL	15 mg/m3	
		6 ppm	
	TWA	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-Methoxymethylethoxypropan ol [DPM] (CAS 34590-94-8)

Can be absorbed through the skin.

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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 stateLiquid.FormLiquid.ColorDark 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 2

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.

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 Not available

(n-octanol/water)

Auto-ignition temperature Not available

Decomposition temperature Not available

Viscosity Not available.

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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 No hazardous decomposition products are known.

products

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		
Dermal		
LD50	Rabbit	95200 ml/kg estimated
		20207.2969 mg/kg estimated
Inhalation		
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
Oral		
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

Material name: SPRAY CLEAN HD SDS US

Components Species Test Results

2-Methoxymethylethoxypropan ol [DPM]

(CAS 34590-94-8)

Acute

Acute Dermal

LD50 Rabbit 9.5 g/kg

Oral

LD50 Rat 5.4 ml/kg

5.35 g/kg

Ethanol, 2-amino- (CAS 141-43-5)

Acute Dermal

LD50 Rabbit 1025 mg/kg

Oral

LD50 Guinea pig 620 mg/kg

 Mouse
 700 mg/kg

 Rat
 10.2 g/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

Causes serious eye damage.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicityNo 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 toxicityThis 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, ethox	xylated (CAS 68439	9-46-3)		
Aquatic				
Crustacea	EC50	Water flea (Daphnia magna)	2.9 - 8.5 mg/l, 48 hours	

Material name: SPRAY CLEAN HD

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

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)

Persistence and degradability No.

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 instructionsBuyer 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 No

chemical

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

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Safe Drinking Water Act Not regulated.

(SDWA)

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

2-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

HMIS® ratings

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

Health: 3 Flammability: 0

Physical hazard: 0

Disclaimer No representations or warranties, either express or implied, of merchantability, fitness for a

particular purpose, or of any nature are made with respect to the product(s) or information contained in this material safety data sheet. The information and recommendations contained in this Material Safety Data Sheet are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. All information contained herein is presented in good faith and is believed to be appropriate and accurate. The buyer or user assumes all risks associated with the use, misuse or disposal of this product. The buyer or user is responsible to comply with all federal, state or local regulations concerning the use, misuse or

disposal of these products.

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

Material name: SPRAY CLEAN HD sps us