SAFETY DATA SHEET



1. Identification

Product identifier	SPRAY CLEAN HD
Other means of identification	
SDS number	507N09B
Product code	HIL00119
Recommended use	General Cleaner
Recommended restrictions	For Labeled Use Only
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	Serious eye damage/eye irritation	Category 2A
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		
	▲	



	▼
Signal word	Warning
Hazard statement	Causes serious eye irritation.
Precautionary statement	
Prevention	Wash thoroughly after handling. Wear eye protection/face protection.
Response	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.
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. CONTAINER DISPOSAL: Triple rinse (or equivalent), then offer clean, dry container for recycling or reconditioning.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
2-Methoxymethylethoxypropan ol [DPM]		34590-94-8	3 - < 5
Alcohols, C9-11, Ethoxylated		68439-46-3	1 - < 3
Ethanolamine		141-43-5	< 1
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	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
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. If eye irritation persists: Get medical advice/attention.
Ingestion	Rinse mouth thoroughly. If ingestion of a large amount does occur, call a poison control center immediately.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
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	Water fog. Foam. 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	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special protective equipment
and precautions for firefightersSelf-contained breathing apparatus and full protective clothing must be worn in case of fire.Fire fighting
equipment/instructionsMove containers from fire area if you can do so without risk.Specific methodsUse standard firefighting procedures and consider the hazards of other involved materials.General fire hazardsNo 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.
Methods and materials for	This product is miscible in water.
containment and cleaning up	Large Spills: 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 discharge into drains, water courses or onto the ground.
7. Handling and storage	
Precautions for safe handling	Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

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 Components	Туре	Value
2-Methoxymethylethoxyprop an ol [DPM]	PEL	600 mg/m3
(CAS 34590-94-8)		100 ppm
Ethanolamine (CAS	PEL	6 mg/m3
141-43-5)		3 ppm
US. ACGIH Threshold Limit	Maluaa	5 ppm
Components	Type	Value
2-Methoxymethylethoxyprop an ol [DPM] (CAS 34590-94-8)	STEL	150 ppm
	TWA	100 ppm
Ethanolamine (CAS 141-43-5)	STEL	6 ppm
	TWA	3 ppm
US. NIOSH: Pocket Guide to	o Chemical 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
Ethanolamine (CAS 141-43-5)	STEL	15 mg/m3
		6 ppm
	TWA	8 mg/m3
	NI. 11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	3 ppm
logical limit values	No biological exposure lim	its noted for the ingredient(s).
osure guidelines		
US - California OELs: Skin	-	
2-Methoxymethylethoxyp (CAS 34590-94-8)		Can be absorbed through the skin.
US - Tennessee OELs: Skin	-	
2-Methoxymethylethoxyp (CAS 34590-94-8)		Can be absorbed through the skin.
US ACGIH Threshold Limit		
2-Methoxymethylethoxyp (CAS 34590-94-8)		Can be absorbed through the skin.
US NIOSH Pocket Guide to		-
2-Methoxymethylethoxyp (CAS 34590-94-8)		Can be absorbed through the skin.
US. OSHA Table Z-1 Limits 2-Methoxymethylethoxyp	-	Can be absorbed through the skin.
(CAS 34590-94-8) propriate engineering		hould be used. Ventilation rates should be matched to conditions. If
trols	maintain airborne levels be	Iclosures, local exhaust ventilation, or other engineering controls to elow recommended exposure limits. If exposure limits have not been prne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles). Avoid contact with eyes.
Skin protection	
Hand protection	Not normally needed.
Other	Not normally needed.
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 threshold	Not available
рН	10.5 - 11.5
Melting point/freezing point	Not available
Initial boiling point and boiling range	207 °F (97.22 °C)
Flash point	> 212.0 °F (> 100.0 °C) Tag Closed Cup
Evaporation rate	< 1 Ethyl ether = 1
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	losive 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	1.021 at 77°F
Solubility(ies)	
Solubility (water)	100 % complete
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Other information	
Density	8.50 lb/gal
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Percent volatile	> 98 %
VOC	6.2 %
10 Stability and reactivity	

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	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Causes serious eye irritation.
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.

Information on toxicological effects

Acute toxicity	Not known.	
Components	Species	Test Results
Ethanolamine (CAS 141-43-5)		
Acute		
Dermal		
LD50	Rabbit	1025 mg/kg
* Estimates for product may l	be based on additional component	data not shown.
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory or skin sensitizatio	'n	
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	Not classifiable as to carcinogenicity to humans.	
IARC Monographs. Overall	Evaluation of Carcinogenicity	
Not listed.		
US. National Toxicology Pr	ogram (NTP) Report on Carcino	gens
Not listed.		
	ulated Substances (29 CFR 1910).1001-1050)
Not regulated.	This product is not expected to	aquiae reproductive or developmental offecto
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	Prolonged inhalation may be harmful.	
12. Ecological information	n	
Ecotoxicity		environmentally hazardous. However, this does not exclude the spills can have a harmful or damaging effect on the environment.
Product	Species	Test Results

Product		Species	Test Results
SPRAY CLEAN HD			
Aquatic			
Crustacea	EC50	Daphnia	478.3585 mg/l, 48 hours estimated
Fish	LC50	Fish	637.273 mg/l, 96 hours estimated

Components		Species	Test Results
Alcohols, C9-11, Ethox	ylated (CAS 6843	9-46-3)	
Aquatic			
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
Ethanolamine (CAS 14	1-43-5)		
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.	
sistence and degradab	bility No data is	s available on the degradability of this product.	
accumulative potentia	I		
Partition coefficient n Ethanolamine	-octanol / water (log Kow) -1.31	
bility in soil	No data a	vailable.	
er 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.	
. Disposal conside	rations		
posal instructions	Collect ar	nd reclaim or dispose in sealed containers at lic	censed waste disposal site. Do not

Disposal instructions	containinate 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). 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. 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

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

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 or Exempt.

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 regulated.

Superfund Amendments and Re	authorization Act of 1986 (SARA)	
Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No	
SARA 302 Extremely hazard	lous 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	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)*

Country(s) or region	Inventory name On ir	ventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	Yes
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	01-22-2015
Revision date	11-07-2017
Version #	03
HMIS® ratings	Health: 2 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	This document has undergone significant changes and should be reviewed in its entirety.