HILLYARD The Cleaning Resource*

SAFETY DATA SHEET

1. Identification

Product identifier RESTORER

Other means of identification

SDS number 567N98A
Product code HIL00539
Recommended use Floor Finish
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 hazardsFlammable liquidsCategory 4Health hazardsSerious eye damage/eye irritationCategory 2AEnvironmental hazardsHazardous to the aquatic environment,Category 4

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Combustible liquid. Causes serious eye irritation. Harmful to aquatic life. May cause long lasting

harmful effects to aquatic life.

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Wash thoroughly after

handling. Avoid release to the environment. Wear protective gloves/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. In case of fire:

Use appropriate media to extinguish.

Storage Store in a well-ventilated place. Keep cool.

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 None.

Material name: RESTORER SDS US

HIL00539 Version #: 02 Revision date: 04-05-2016 Issue date: 02-10-2015

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
2-Methoxymethylethoxypropan ol [DPM]		34590-94-8	1 - < 3
Isopropyl Alcohol		67-63-0	1 - < 3
Alcohols (C12-15 In, Saturated) Ethoxylate		68131-39-5	< 1
Other components below reportable level	s		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.

Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. 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 if irritation develops and persists.

Rinse mouth thoroughly. Drink plenty of water. Get medical attention if any discomfort continues. Ingestion

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

General information

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

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

Specific hazards arising from the chemical

Special protective equipment and precautions for firefighters

Fire fighting equipment/instructions

Specific methods

General fire hazards

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

The product is combustible, and heating may generate vapors which may form explosive vapor/air

mixtures. During fire, gases hazardous to health may be formed. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do

so without risk. Use standard firefighting procedures and consider the hazards of other involved materials.

Combustible liquid.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Material can be slippery when wet. 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. Follow precautions for safe handling described in this safety data sheet. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

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

Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke. Avoid contact with eyes. 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

Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

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

Occupational exposure limits

Components	Туре	Value	
2-Methoxymethylethoxyprop an ol [DPM] (CAS 34590-94-8)	PEL	600 mg/m3	
,		100 ppm	
Isopropyl Alcohol (CAS 67-63-0)	PEL	980 mg/m3	
,		400 ppm	
US. ACGIH Threshold Limit Values	•		
Components	Туре	Value	
2-Methoxymethylethoxyprop an ol [DPM] (CAS 34590-94-8)	STEL	150 ppm	
(6.16.6.166.6.16)	TWA	100 ppm	
Isopropyl Alcohol (CAS 67-63-0)	STEL	400 ppm	
,	TWA	200 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	
Isopropyl Alcohol (CAS 67-63-0)	STEL	1225 mg/m3	
		500 ppm	
	TWA	980 mg/m3	
		400 ppm	

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Biological limit values

ACGIH Biological Exposure Indices

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

^{* -} For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

2-Methoxymethylethoxypropan ol [DPM] Can be absorbed through the skin.

(CAS 34590-94-8)

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. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical splash goggles where there is a potential for eye contact.

Skin protection

Hand protection For prolonged or repeated skin contact use suitable protective gloves.

Other Normal work clothing (long sleeved shirts and long pants) is recommended.

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 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 Translucent pink

Physical state Liquid.
Form Liquid.
Color Pink.

Odor Fruit punch odor
Odor threshold Not available

pH 8 - 9

Melting point/freezing point Not available

Initial boiling point and boiling

range

> 204 °F (> 95.56 °C) Corrected

Flash point 150.0 °F (65.6 °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.

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Explosive limit - upper (%)Not available.Vapor pressure17.5 mm HgVapor density0.8 AIR=1Relative density1 at 77°F

Solubility(ies)

Solubility (water) 100 % Complete
Partition coefficient Not available

(n-octanol/water)

Auto-ignition temperatureNot availableDecomposition temperatureNot availableViscosityNot available

Other information

 Density
 8.33 lb/gal

 Percent volatile
 97.25 - 98.5 %

 VOC (Weight %)
 5 % (concentrate)

10. Stability and reactivity

ReactivityThe 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 heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the

flash point. Contact with incompatible materials.

Incompatible materials

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 May be irritating to the skin.

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

Strong oxidizing agents.

vision.

Information on toxicological effects

Acute toxicity

Product	Species	Test Results
RESTORER		
Acute		
Dermal		
LD50	Rabbit	16342.5732 ml/kg estimated
		10638.2979 g/kg estimated
Oral		
LD50	Guinea pig	12154.6963 g/kg estimated
	Mouse	66666.6641 g/kg estimated
	Rabbit	250.736 g/kg estimated
	Rat	4358.1416 ml/kg estimated
		225.1776 g/kg estimated

Components Species Test Results

2-Methoxymethylethoxypropan	ol [DPM]
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(CAS 34590-94-8)

Acute

Dermal

LD50 Rabbit 9.5 g/kg

Oral

LD50 Rat 5.4 ml/kg

5.35 g/kg

Isopropyl Alcohol (CAS 67-63-0)

Acute

Dermal

LD50 Rabbit 12800 mg/kg

Oral

LD50 Mouse 3600 mg/kg

Rabbit 5.03 g/kg Rat 4.7 g/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

Causes serious eye irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

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

Chronic effects

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard

Prolonged inhalation may be harmful.

Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Harmful to aquatic life. May cause long lasting harmful effects to aquatic life.

Product		Species	Test Results
RESTORER			
Aquatic			
Crustacea	EC50	Daphnia	8633.7568 mg/l, 48 hours estimated
Fish	LC50	Fish	1658.8414 mg/l, 96 hours estimated
Components		Species	Test Results
Alcohols (C12-15 In, S	Saturated) Ethoxylat	te (CAS 68131-39-5)	
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	0.37 - 0.43 mg/l, 48 hours
Fish	LC50	Channel catfish (Ictalurus punctatus)	1.04 - 1.39 mg/l, 96 hours

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

Components Species Test Results

Isopropyl Alcohol (CAS 67-63-0)

Aquatic

Fish LC50 Western mosquitofish (Gambusia affinis) > 1400 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)

Isopropyl Alcohol 0.05

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 instructionsCollect 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.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste codeThe 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. Triple rinse (or equivalent). Then offer clean, dry container for recycling or reconditioning.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

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 - Yes Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No

chemical

^{*} 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)

Isopropyl Alcohol (CAS 67-63-0)

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

2-Methoxymethylethoxypropan ol [DPM]

(CAS 34590-94-8)

Isopropyl Alcohol (CAS 67-63-0)

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

2-Methoxymethylethoxypropan ol [DPM]

(CAS 34590-94-8)

Isopropyl Alcohol (CAS 67-63-0)

US. Rhode Island RTK

Isopropyl Alcohol (CAS 67-63-0)

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
 02-10-2015

 Revision date
 04-05-2016

Version # 02

HMIS® ratings Health: 2

Flammability: 2 Physical hazard: 0

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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