# HILLYARD The Cleaning Resource\*

# SAFETY DATA SHEET

### 1. Identification

Product identifier Strong Guard Finish / UDF Finish

Other means of identification

SDS number 575N-110E Product code HIL00554

Recommended use Resilient Floor Polish
Recommended restrictions For Labeled Use Only
Protect from Freezing

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** (800) 365-1555 (Ext. 8206)

**Fax** (816) 383-8406

**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 hazardsSerious eye damage/eye irritationCategory 2AReproductive toxicityCategory 1B

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Danger

**Hazard statement** Causes serious eye irritation. May damage fertility or the unborn child.

**Precautionary statement** 

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Wash thoroughly after handling. Wear protective gloves/protective clothing/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 exposed or concerned: Get medical advice/attention. If eye

irritation persists: Get medical advice/attention.

Storage Store locked up.

Material name: Strong Guard Finish / UDF Finish

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 | %        |
|---------------------------|--------------------------|------------|----------|
| Ethoxydiglycol            |                          | 111-90-0   | 1 - < 3  |
| Methyl Pyrrolidone        |                          | 872-50-4   | < 1      |
| Other components below re | portable levels          |            | 90 - 100 |

#### 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. 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.

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** IF exposed or concerned: Get medical advice/attention. 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

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 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.

Material name: Strong Guard Finish / UDF Finish

SDS US HIL00554 Version #: 03 Revision date: 03-25-2025 Issue date: 12-31-2019

# Methods and materials for containment and cleaning up

The product is completely soluble in water.

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 discharge into drains, water courses or onto the ground.

#### 7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with eyes. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. 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. OARS. Workplace Environmental Exposure Level (WEEL) Guide

| Components                        | Type | Value                        |
|-----------------------------------|------|------------------------------|
| Ethoxydiglycol (CAS<br>111-90-0)  | TWA  | 140 mg/m3                    |
| Methyl Pyrrolidone (CAS 872-50-4) | STEL | 25 ppm<br>120 mg/m3          |
|                                   | TWA  | 30 ppm<br>60 mg/m3<br>15 ppm |

#### **Biological limit values**

**ACGIH Biological Exposure Indices (BEI)** 

| Aggir Biological Exposure malous (BEI) |          |  |          |               |  |
|--|----------|--|----------|---------------|--|
| Components                             | Value    | Determinant                              | Specimen | Sampling Time |  |
| Methyl Pyrrolidone (CAS 872-50-4)      | 100 mg/l | 5-Hydroxy-N-m<br>ethyl-2-pyrrolid<br>one | Urine    | *             |  |

<sup>\* -</sup> For sampling details, please see the source document.

#### **Exposure guidelines**

US - California OELs: Skin designation

Methyl Pyrrolidone (CAS 872-50-4)

Can be absorbed through the skin.

US WEEL Guides: Skin designation

Methyl Pyrrolidone (CAS 872-50-4)

Can be absorbed through the skin.

# 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.

#### Individual protection measures, such as personal protective equipment

Eye/face protection Avoid contact with eyes. Use safety eyewear with splash guards or side shields, chemical

goggles, or face shields.

Material name: Strong Guard Finish / UDF Finish

SDS US

HIL00554 Version #: 03 Revision date: 03-25-2025 Issue date: 12-31-2019

Skin protection

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

Other If unable to avoid prolonged or repeated contact with skin, wear impervious clothing.

Respiratory protection If ventilation is insufficient, suitable respiratory protection must be provided.

Thermal hazards None known.

General hygiene considerations Observe any me

Observe any medical surveillance requirements. 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** Milky, white emulsion

Physical state Liquid.

Form Liquid.

Color Milky white

Odor Non-objectional odor.

Odor threshold Not available. pH 7.5 - 8.5

Melting point/freezing point Not applicable / Not available

Initial boiling point and boiling

range

>200 °F (>93.33 °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 17.47 mm Hg

Vapor density 0.8338 Air=1

Relative density 1.027 at 77°F

Solubility(ies)

Solubility (water) 100 %

Partition coefficient

Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.

Other information

Density 8.51

Explosive properties

Oxidizing properties

Not explosive.

Not oxidizing.

Percent volatile

84.5 - 85.5

VOC

CARB Compliant

#### 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.

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** Prolonged skin contact may cause temporary irritation.

**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

8000 mg/kg

vision

Information on toxicological effects

Acute toxicity Not known.

Product Species Test Results

Strong Guard Finish / UDF Finish

<u>Acute</u>

Dermal

LD50 Rabbit 160923 mg/kg

Inhalation

LC50 Rat 349 mg/l, 1 Hours

Oral

LD50 Rat 57773 mg/kg

Components Species Test Results

Ethoxydiglycol (CAS 111-90-0)

Acute Dermal

LD50 Rat 6000 mg/kg

Methyl Pyrrolidone (CAS 872-50-4)

Acute Dermal

LD50 Rabbit

Nabb

Oral

LD50 Rat 3914 mg/kg

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

Serious eye damage/eye

irritation

Causes serious eye irritation.

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** Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

**US. National Toxicology Program (NTP) Report on Carcinogens** 

Not listed.

**Reproductive toxicity** May damage fertility or the unborn child.

Material name: Strong Guard Finish / UDF Finish

SDS US

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Prolonged inhalation may be harmful.

#### 12. Ecological information

**Ecotoxicity** 

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Product             |              | Species                    | Test Results                        |
|---------------------|--------------|----------------------------|-------------------------------------|
| Strong Guard Finish | / UDF Finish |                            |                                     |
| Aquatic             |              |                            |                                     |
| Crustacea           | EC50         | Daphnia                    | 5044444672 mg/l, 48 hours estimated |
| Fish                | LC50         | Fish                       | 1633.2191 mg/l, 96 hours            |
| Acute               |              |                            |                                     |
| Crustacea           | EC50         | Daphnia                    | 1433333376 mg/l, 48 hours estimated |
| Fish                | LC50         | Fish                       | 1592.0419 mg/l, 96 hours estimated  |
| Components          |              | Species                    | Test Results                        |
| Ethoxydiglycol (CAS | 111-90-0)    |                            |                                     |
| Aquatic             |              |                            |                                     |
| Acute               |              |                            |                                     |
| Fish                | LC50         | Fathead minnow (Pimephales | 7910 - 11800 mg/l, 96 hours         |

Persistence and degradability

No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

-0.54Ethoxydiglycol Methyl Pyrrolidone -0.38

Mobility in soil This product is completely water soluble and will disperse in soil.

promelas)

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 Collect and reclaim or dispose in sealed containers at licensed waste disposal site. 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 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.

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.

#### 14. Transport information

DOT

Not regulated as dangerous goods.

**IATA** 

Not regulated as dangerous goods.

Material name: Strong Guard Finish / UDF Finish

#### **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.

**Toxic Substances Control Act (TSCA)** 

One or more components of the mixture are not on the TSCA 8(b) inventory

or are designated "inactive".

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 1910.1001-1053)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Yes

chemical

Classified hazard

Serious eye damage or eye irritation

categories

Reproductive toxicity

SARA 313 (TRI reporting)

**Chemical name** CAS number % by wt. Methyl Pyrrolidone 872-50-4 < 1

#### 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

Contains component(s) regulated under the Safe Drinking Water Act.

(SDWA)

US state regulations

California Proposition 65

California Proposition 65 - CRT: Listed date/Developmental toxin

Methyl Pyrrolidone (CAS 872-50-4) Listed: June 15, 2001

**International Inventories** 

Country(s) or region Inventory name On inventory (yes/no)\* Canada Domestic Substances List (DSL) Nο Canada Non-Domestic Substances List (NDSL) 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 12-31-2019 Revision date 03-25-2025

Material name: Strong Guard Finish / UDF Finish

HIL00554 Version #: 03 Revision date: 03-25-2025 Issue date: 12-31-2019

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.

Material name: Strong Guard Finish / UDF Finish

HIL00554 Version #: 03 Revision date: 03-25-2025 Issue date: 12-31-2019

# HILLYARD The Cleaning Resource\*

# SAFETY DATA SHEET

#### 1. Identification

Product identifier CROSSLINKER

Other means of identification

SDS number 566N-144A

Product code HIL00756 / HIL00197

Recommended use CROSSLINKER Wood Finish Use with Pro 200, Pro 400, Uphold, Pro Satin, UDF / Strong Guard,

Recon, and Trophy H2O.

**Recommended restrictions** For Labeled Use Only

Protect from Freezing

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** (800) 365-1555 (Ext. 8206)

Fax (816) 383-8406

**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 4

Serious eye damage/eye irritation Category 1
Sensitization, skin Category 1
Germ cell mutagenicity Category 2
Specific target organ toxicity, repeated Category 2

exposure

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Danger

**Hazard statement** Harmful if swallowed. May cause an allergic skin reaction. Causes serious eye damage.

Suspected of causing genetic defects. May cause damage to organs through prolonged or

repeated exposure.

Precautionary statement

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Do not breathe dust, mist, gas, vapors or spray. Wash skin and face thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Wear permeation resistant protective gloves and

clothing. Wear eye/face protection.

Material name: CROSSLINKER

Response IF ON SKIN (or hair): Wash with plenty of soap and 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 doctor or emergency medical facility (i.e., 911) If skin irritation or rash occurs:

Get medical attention. Wash contaminated clothing before reuse.

Storage Store locked up.

Disposal Dispose of contents and container in accordance with existing federal, state, and local

environmental control laws.

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 | %      |
|--|--------------------------|------------|--------|
| Trimethylolpropane   |                          | 64265-57-2 | 95-100 |
| Tris(2-methyl-1-aziridine)propior  | nate                     |            |        |
| *Designates that a specific chemical identity and/or percentage has been withheld as a trade secret. |                          | 2.5        |        |

#### 4. First-aid measures

**Inhalation** If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

Call a physician or poison control center immediately.

**Skin contact** Remove contaminated clothing immediately and wash skin with soap and water. In case of

eczema or other skin disorders: Seek medical attention and take along these instructions.

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

Call a physician or poison control center immediately. Rinse mouth thoroughly. Drink 1 or 2 glasses of water. Never give anything by mouth to a victim who is unconscious or is having

convulsions. Do not induce vomiting without advice from poison control center. If vomiting occurs,

keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and

delayed Indication of immediate

Indication of immediate medical attention and special treatment needed

Harmful if swallowed. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects.

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

General information

IF exposed or concerned: Get medical advice/attention. 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. Wash contaminated clothing before reuse.

# 5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing media

Water fog. Foam. 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 breathe mist/vapors. 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.

Material name: CROSSLINKER

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. 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. Put material in suitable, covered, labeled containers. 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

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapors. Do not get this material in contact with eyes. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store away from incompatible materials (see Section 10 of the SDS). Store in tightly closed original container in a well-ventilated place. Crosslinker should be stored between 41°F and 104°F. Substances to avoid: Oxidizing agents, Anhydrides, Acids, Copper, Copper compounds, Silver, Silver compounds.

2 ppm

### 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  | Туре           | Value   |  |  |
| 2-Methylaziridine (CAS 75-55-8)                                   | PEL            | 5 mg/m3 |  |  |
|   |                | 2 ppm   |  |  |
| US. ACGIH Threshold Limit Valu                                    | ies            |         |  |  |
| Components  | Type           | Value   |  |  |
| 2-Methylaziridine (CAS 75-55-8)                                   | STEL           | 0.4 ppm |  |  |
| ,   | TWA            | 0.2 ppm |  |  |
| US. NIOSH: Pocket Guide to Ch                                     | emical Hazards |         |  |  |
| Components  | Туре           | Value   |  |  |
| 2-Methylaziridine (CAS 75-55-8)                                   | TWA            | 5 mg/m3 |  |  |

Biological limit values

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

#### **Exposure guidelines**

US - California OELs: Skin designation

2-Methylaziridine (CAS 75-55-8) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

2-Methylaziridine (CAS 75-55-8) Skin designation applies.

US - Tennessee OELs: Skin designation

2-Methylaziridine (CAS 75-55-8)

Can be absorbed through the skin.

**US ACGIH Threshold Limit Values: Skin designation** 

2-Methylaziridine (CAS 75-55-8) Danger of cutaneous absorption

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

2-Methylaziridine (CAS 75-55-8)

Can be absorbed through the skin.

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

2-Methylaziridine (CAS 75-55-8)

Can be absorbed through the skin.

Material name: CROSSLINKER SDS US

# 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. Provide eyewash station.

#### Individual protection measures, such as personal protective equipment

Eye/face protection

Avoid contact with eyes. Chemical resistant goggles must be worn., Chemical safety goggles in combination with a full face shield if a splash hazard exists.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Ensure gloves remain in good condition during use and replace if any deterioration is observed. Permeation resistant gloves., Neoprene gloves, Butyl

rubber gloves., Nitrile rubber gloves.

Other Avoid contact with the skin. Permeation resistant clothing.

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece.

**Thermal hazards** None known. Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Observe any medical surveillance requirements. 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. Contaminated work clothing should not be allowed out of the workplace.

# 9. Physical and chemical properties

Appearance Light yellow liquid

Physical state
Form
Color
Liquid.
Liquid.
Liquid.
Light yellow.

Odor
Amine-like.

Odor threshold
Not available.

PH
Not available
Melting point/freezing point
Not applicable

Initial boiling point and boiling

range

> 347 °F (> 175 °C) Decomposes > 175 °C

Flash point 487.4 °F (253.0 °C) Closed Cup

Evaporation rate Not available Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available

Vapor density Not available

Relative density Not available

Solubility(ies)

Solubility (water) Not available
Partition coefficient Not Available

(n-octanol/water)

Auto-ignition temperature 653 °F (345 °C)

Decomposition temperature No decomposition if used as directed

Viscosity 200 cP at 68°F

Other information

Density 8.95 lb/gal at 68° F
Explosive properties Not explosive.

Oxidizing properties Not oxidizing.

Percent volatile Not available

VOC Not available

#### 10. Stability and reactivity

**Reactivity**The product is stable and non-reactive under normal conditions of use, storage and transport.

Exothermic reaction with strong acids.

 Material name: CROSSLINKER
 SDS US

 HIL00756 / HIL00197
 Version #: 07
 Revision date: 04-12-2023
 Issue date: 05-21-2018
 4 / 8

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

Conditions to avoid

reactions

No dangerous reaction known under conditions of normal use.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials.

Oxidizing agents, Anhydrides, Acids, Copper, Copper compounds, Silver, Silver compounds.

Incompatible materials

**Hazardous decomposition** 

products

Product

No hazardous decomposition products are known.

#### 11. Toxicological information

#### Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful. Skin contact May cause an allergic skin reaction.

Causes serious eye damage. Eye contact

Harmful if swallowed. Ingestion

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. May cause an allergic skin

**Test Results** 

reaction. Dermatitis. Rash.

**Species** 

#### Information on toxicological effects

Harmful if swallowed. **Acute toxicity** 

**CROSSLINKER** Acute **Dermal** Rabbit LD50 35000 mg/kg Inhalation LC50 Rat 6.35e+006 mg/l, 4 Hours **Test Results** Components **Species** 

2-Methylaziridine (CAS 75-55-8)

**Acute Dermal** 

LD50 Guinea pig 43 mg/kg

Oral

LD50 Rat 19 mg/kg

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

Serious eye damage/eye

irritation

Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

May cause an allergic skin reaction. Skin sensitization Suspected of causing genetic defects. Germ cell mutagenicity

Not classifiable as to carcinogenicity to humans. Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

2-Methylaziridine (CAS 75-55-8) 2B Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

2-Methylaziridine (CAS 75-55-8) Reasonably Anticipated to be a Human Carcinogen.

This product is not expected to cause reproductive or developmental effects. Reproductive toxicity

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

May cause damage to organs through prolonged or repeated exposure.

repeated exposure

Material name: CROSSLINKER SDS US 5/8 Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful. May cause damage to organs through prolonged or

repeated exposure.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product Species Test Results

CROSSLINKER

Aquatic

Fish LC50 Fish 13135.791, 96 hours

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

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

CROSSLINKER 1, Not Available

2-dimethylaminoethanol -0.55 2-Methylaziridine 0.13

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 Collect and reclaim or dispose in sealed containers at licensed waste disposal site. 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**The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

US RCRA Hazardous Waste P List: Reference

2-Methylaziridine (CAS 75-55-8) P067

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.

14. Transport information

DOT

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and

Not established.

Annex II of MARPOL /3//8 a

the IBC Code

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.

Toxic Substances Control Act (TSCA)

One or more components of the mixture are not on the TSCA 8(b) inventory

or are designated "inactive".

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)** 

2-Methylaziridine (CAS 75-55-8) Listed.

SARA 304 Emergency release notification

Aziridine, 2-methyl (CAS 75-55-8) 1 LBS

Material name: CROSSLINKER SDS US

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

# Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### SARA 302 Extremely hazardous substance

| Chemical name CAS number Reportable quantity (pounds) | Threshold planning quantity (pounds) | Threshold<br>planning quantity,<br>lower value<br>(pounds) | Threshold<br>planning quantity,<br>upper value<br>(pounds) |  |
|---|--------------------------------------|--|--|--|
|---|--------------------------------------|--|--|--|

2-Methylaziridine 75-55-8 1 10000

SARA 311/312 Hazardous

chemical

s Yes

Classified hazard categories

Acute toxicity (any route of exposure) Serious eye damage or eye irritation Respiratory or skin sensitization

Germ cell mutagenicity

Specific target organ toxicity (single or repeated exposure)

#### SARA 313 (TRI reporting)

| Chemical name     | CAS number | % by wt. |  |
|-------------------|------------|----------|--|
| 2-Methylaziridine | 75-55-8    | < 0.2    |  |

#### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

2-Methylaziridine (CAS 75-55-8)

# Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

2-Methylaziridine (CAS 75-55-8)

Safe Drinking Water Act

Not regulated.

(SDWA)

#### US state regulations

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

2-Methylaziridine (CAS 75-55-8)

#### **California Proposition 65**



WARNING: This product can expose you to 2-Methylaziridine, which is known to the State of California to

cause cancer. For more information go to www.P65Warnings.ca.gov.

#### California Proposition 65 - CRT: Listed date/Carcinogenic substance

2-Methylaziridine (CAS 75-55-8) Listed: January 1, 1988

#### **International Inventories**

Country(s) or regionInventory nameOn inventory (yes/no)\*CanadaDomestic Substances List (DSL)NoCanadaNon-Domestic Substances List (NDSL)YesUnited States & Puerto RicoToxic Substances Control Act (TSCA) InventoryYes

\*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
 05-21-2018

 Revision date
 04-12-2023

Version # 07

HMIS® ratings Health: 3\*

Flammability: 1 Physical hazard: 0

Material name: CROSSLINKER

#### 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.

Material name: CROSSLINKER SDS US