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29 CFR 1910.1200 (OSHA HazCom 2012)

# **SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

**Product identifier** 

Trade name : Pliogrip™ 5770P/220

**ADHESIVE** 

™ Trademark, Ashland or its subsidiaries, registered in

various countries

#### Recommended use of the chemical and restrictions on use

Details of the supplier of the safety data sheet

Ashland

Emergency telephone number 1-800-ASHLAND (1-800-274-5263)

P.O. Box 2219

Columbus, OH 43216 United States of America

EHS Customer Requests@ashland.com

Regulatory Information Number

1-800-325-3751

**Product Information** 

614-790-3333

#### **SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification** 

Skin corrosion : Category 1

Serious eye damage : Category 1

Skin sensitization : Category 1

**GHS Label element** 

Hazard pictograms





Signal Word : Danger

Hazard Statements : Causes severe skin burns and eye damage.

May cause an allergic skin reaction. Causes serious eye damage.

Precautionary Statements : Prevention:

Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

Wash skin thoroughly after handling.

Contaminated work clothing must not be allowed out of the

workplace.

Wear protective gloves/ protective clothing/ eye protection/ face

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# protection.

# Response:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

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 or doctor/physician.

If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before reuse.

# Storage:

Store locked up.

# Disposal:

Dispose of contents/ container to an approved waste disposal plant.

# Other hazards

None known.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

# **PART A**

**Hazardous components** 

Chemical Name	CAS-No.	Classification	Concentration (%)
POLYMER	254504001-6320	Skin Irrit. 2; H315	13.30
		Eye Irrit. 2A; H319	
		Skin Sens. 1; H317	
		Aquatic Chronic 2; H411	
ORGANIC COMPOUND	254504001-6318	Skin Corr. 1B; H314	2.34
		Eye Dam. 1; H318	
		Skin Sens. 1B; H317	

The identity of one or more component(s) is being withheld under business confidentiality.

BISPHENUL A-   25068-38-6   Skin Sens. 1B; H317   52.00	BISPHENOL A-	25068-38-6	Skin Sens. 1B; H317	52.00
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EPICHLOROHYDRIN POLYMER			
TALC	14807-96-6	This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).	4.00
3-(TRIMETHOXYSILYL)PROPYL GLYCIDYL ETHER	2530-83-8	Eye Dam. 1; H318	2.00

PART B

Substance / Mixture : Mixture

**Hazardous components** 

Hazardous components			
Chemical Name	CAS-No.	Classification	Concentration (%)
POLYMER	254504001-6317	Skin Irrit. 2; H315 Skin Sens. 1; H317	>= 10.00 - < 15.00
ORGANIC COMPOUND	254504001-6322	Acute Tox. 4; H302 Acute Tox. 3; H311 Skin Corr. 1; H314 Eye Dam. 1; H318 Skin Sens. 1; H317	>= 1.00 - < 1.50

The identity of one or more component(s) is being withheld under business confidentiality.

DIETHYLENE GLYCOL DI(AMINOPROPYL)ETHER	4246-51-9	Skin Corr. 1; H314	20.00
,		Eye Dam. 1; H318	
		Skin Sens. 1; H317	

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POLYOXYPROPYLENEDIAMINE	9046-10-0	Skin Corr. 1C; H314 Eye Dam. 1; H318	20.00
POLY[OXY(METHYL-1,2- ETHANEDIYL)], .ALPHA.,.ALPHA.',.ALPHA."- 1,2,3- PROPANETRIYLTRIS[.OMEGA (2-AMINOMETHYLETHOXY)-	64852-22-8	Skin Irrit. 2; H315 Eye Dam. 1; H318	20.00
2-PROPENENITRILE, POLYMER WITH 1,3-BUTADIENE, 1-C	68683-29-4	Skin Irrit. 2; H315 Eye Irrit. 2A; H319 Skin Sens. 1; H317	10.00
2,4,6- TRIS(DIMETHYLAMINOMETHYL )PHENOL	90-72-2	Skin Corr. 1; H314 Eye Dam. 1; H318	5.39
TALC	14807-96-6	This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).	5.00

# **SECTION 4. FIRST AID MEASURES**

General advice : Move out of dangerous area.

Consult a physician.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

If inhaled : Move to fresh air.

If breathed in, move person into fresh air.

Keep patient warm and at rest.

If unconscious place in recovery position and seek medical

advice.

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If symptoms persist, call a physician.

In case of skin contact : Remove contaminated clothing. If irritation develops, get

medical attention.

If on skin, rinse well with water.

Wash contaminated clothing before re-use.

In case of eye contact : In the case of contact with eyes, rinse immediately with plenty

of water and seek medical advice.

Continue rinsing eyes during transport to hospital.

Remove contact lenses. Protect unharmed eye.

If swallowed : Get medical attention immediately.

Do NOT induce vomiting. Rinse mouth with water.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

Most important symptoms and effects, both acute and

delayed

: Signs and symptoms of exposure to this material through

breathing, swallowing, and/or passage of the material through

the skin may include:

stomach or intestinal upset (nausea, vomiting, diarrhea)

irritation (nose, throat, airways)

Drowsiness

May cause an allergic skin reaction. Causes serious eye damage.

Causes severe burns.

Notes to physician : No hazards which require special first aid measures.

# **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Water spray Foam

Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

: High volume water jet

Specific hazards during

firefighting

: Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion

products

: carbon dioxide and carbon monoxide

Hydrocarbons phenols

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Nitrogen oxides (NOx)

Ammonia formaldehyde

nitrogen oxides (NOx)

sulfur oxides acid vapors carboxylic acids Methanol silicone polymers

silicon dioxide various hydrocarbons

Hydrogen

Specific extinguishing

methods

Product is compatible with standard fire-fighting agents.

Further information : Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

for firefighters

Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

# **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures

: Use personal protective equipment.

Persons not wearing protective equipment should be excluded

from area of spill until clean-up has been completed.

Environmental precautions : Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

Other information : Comply with all applicable federal, state, and local regulations.

# **SECTION 7. HANDLING AND STORAGE**

Advice on safe handling : Do not breathe vapours/dust.

Do not smoke.

Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

used.

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Container hazardous when empty.

Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes.

Smoking, eating and drinking should be prohibited in the

application area.

For personal protection see section 8.

Dispose of rinse water in accordance with local and national

regulations.

Conditions for safe storage

: Keep container tightly closed in a dry and well-ventilated

place.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage.

Observe label precautions.

# **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

# Components with workplace control parameters PART A

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
TALC	14807-96-6	TWA	2 mg/m3 Respirable fraction.	ACGIH
		REL	2 mg/m3 Respirable.	NIOSH/GUID E
		TWA	0.1 mg/m3 Respirable.	Z3
		TWA	0.3 mg/m3 Total dust.	Z3

# **PART B**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
TALC	14807-96-6	TWA	2 mg/m3 Respirable fraction.	ACGIH
		REL	2 mg/m3 Respirable.	NIOSH/GUID E
		TWA	0.1 mg/m3	Z3

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	Respirable.	
TWA	0.3 mg/m3	Z3
	Total dust.	

Engineering measures : Provide sufficient mechanical (general and/or local exhaust)

ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or

apparent adverse effects.

Personal protective equipment Hand protection

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection : Safety glasses

Skin and body protection : Wear as appropriate:

Impervious clothing Chemical resistant apron

Safety shoes

Choose body protection according to the amount and concentration of the dangerous substance at the work place. Discard gloves that show tears, pinholes, or signs of wear. Wear resistant gloves (consult your safety equipment

supplier).

Hygiene measures : Wash hands before breaks and at the end of workday.

When using do not eat or drink.

Ensure that eyewash stations and safety showers are close to

the workstation location. When using do not smoke.

# **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

# **PART A**

Appearance : paste

Physical state : liquid

Colour : dark violet

Odour : Faint

Odour Threshold : No data available

pH : Not applicable

Melting point/range : No data available

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Boiling point/boiling range : No data available

Flash point :  $> 220 \, ^{\circ}\text{F} / > 104 \, ^{\circ}\text{C}$ 

Method: Closed Cup

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : 1.16

Density : No data available

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

Oxidizing properties : No data available

PART B

Physical state : liquid

Colour : tan

Odour : No data available

Odour Threshold : No data available

pH : No data available

Melting point/range : No data available

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Boiling point/boiling range : No data available

Flash point :  $> 219 \,^{\circ}\text{F} / > 104 \,^{\circ}\text{C}$ 

Method: Closed Cup

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : No data available

Density : 1.06 g/cm3 (23 °C)

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

Oxidizing properties : No data available

# **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous

reactions

: Product will not undergo hazardous polymerization.

Conditions to avoid : Exposure to air.

Exposure to moisture

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Incompatible materials : Acids

Amines Bases

Oxidizing agents

peroxides

sodium hypochlorite

water Peroxides

Hazardous decomposition

products

carbon dioxide and carbon monoxide

formaldehyde-like Hydrocarbons Methanol

Nitrogen oxides (NOx)

phenols

silicone polymers Sulphur oxides Ammonia silicon dioxide

various hydrocarbons

# **SECTION 11. TOXICOLOGICAL INFORMATION**

Information on likely routes of : Inhalation

exposure

Skin contact

Eye Contact Ingestion

Acute toxicity

Not classified based on available information.

Components: POLYMER:

Acute oral toxicity : LD 50 (Rat): > 5,000 mg/kg

Acute dermal toxicity : LD 50 (Rabbit): > 2,000 mg/kg

POLYMER:

Acute oral toxicity : LD50 (Rat): > 15.4 g/kg

Remarks: Information given is based on data obtained from

similar substances.

Acute dermal toxicity : LD50 (Rabbit): > 3 g/kg

Remarks: Information given is based on data obtained from

similar substances.

ORGANIC COMPOUND:

Acute oral toxicity : LD50 (Rat): > 2,000 - < 5,000 mg/kg

Method: OECD Test Guideline 401

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Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 402

ORGANIC COMPOUND:

Acute oral toxicity : LD 50 (Rat): 2,097 mg/kg

Assessment: The component/mixture is classified as acute

oral toxicity, category 4.

Acute dermal toxicity : LD 50 (Rabbit): 866 mg/kg

**Components:** 

BISPHENOL A-EPICHLOROHYDRIN POLYMER:

Acute oral toxicity : LD 50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 420

Assessment: No adverse effect has been observed in acute

oral toxicity tests.

Acute dermal toxicity : LD 50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 402

Assessment: Not classified as acutely toxic by dermal

absorption under GHS.

DIETHYLENE GLYCOL DI(AMINOPROPYL)ETHER:

Acute oral toxicity : LD 50 (Rat): ca. 3,160 mg/kg

Acute dermal toxicity : LD 50 (Rabbit): Estimated > 2,500 mg/kg

LD 50 (Rat): > 2,150 mg/kg

Method: OECD Test Guideline 402

POLYOXYPROPYLENEDIAMINE:

Acute oral toxicity : LD50 (Rat): 2,885 mg/kg

Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rabbit): 2,979 mg/kg

Method: OECD Test Guideline 402

POLY[OXY(METHYL-1,2-ETHANEDIYL)], .ALPHA.,.ALPHA.',.ALPHA."-1,2,3-

PROPANETRIYLTRIS[.OMEGA.-(2-AMINOMETHYLETHOXY)-: Acute oral toxicity : LD50 (Rat): 2,690 mg/kg

Acute dermal toxicity : LD50 (Rabbit): 12,500 mg/kg

2-PROPENENITRILE, POLYMER WITH 1,3-BUTADIENE, 1-C:

Acute oral toxicity : LD50 (Rat): > 15 g/kg

Acute dermal toxicity : LD50 (Rabbit): > 3 g/kg

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL:

Acute oral toxicity : LD 50 (Rat): 2,169 mg/kg

Method: OECD Test Guideline 401

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3-(TRIMETHOXYSILYL)PROPYL GLYCIDYL ETHER: Acute oral toxicity : LD 50 (Rat): 8,025 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC 50 (Rat): > 5.3 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: OECD Test Guideline 403

Acute dermal toxicity : LD 50 (Rabbit): 4,250 mg/kg

# Skin corrosion/irritation

Causes severe burns.

# **Product:**

Remarks: May cause skin irritation in susceptible persons., Causes severe skin burns and eye

damage.

# **Components:**

POLYMER:

Result: No skin irritation

#### POLYMER:

Result: Irritating to skin.

Remarks: Information given is based on data obtained from similar substances.

# ORGANIC COMPOUND:

Species: Rabbit

Method: OECD Test Guideline 404

Result: Corrosive after 3 minutes to 1 hour of exposure

# ORGANIC COMPOUND:

Result: Corrosive to skin

# **Components:**

BISPHENOL A-EPICHLOROHYDRIN POLYMER:

Result: Slightly irritating to skin

# DIETHYLENE GLYCOL DI(AMINOPROPYL)ETHER:

Result: Corrosive to skin

# POLYOXYPROPYLENEDIAMINE:

Result: Corrosive, category 1C - where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days.

# POLY[OXY(METHYL-1,2-ETHANEDIYL)], .ALPHA.,.ALPHA.',.ALPHA."-1,2,3-

PROPANETRIYLTRIS[.OMEGA.-(2-AMINOMETHYLETHOXY)-:

Result: Irritating to skin.

# 2-PROPENENITRILE, POLYMER WITH 1,3-BUTADIENE, 1-C:

Result: Irritating to skin.

TALC:

Result: Possibly irritating to skin

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# 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL:

Result: Corrosive to skin

# 3-(TRIMETHOXYSILYL)PROPYL GLYCIDYL ETHER:

Result: Slightly irritating to skin

# Serious eye damage/eye irritation

Causes serious eye damage.

**Product:** 

Remarks: May cause irreversible eye damage.

# **Components:**

POLYMER:

Result: No eye irritation

POLYMER:

Result: Slightly irritating to eyes

Remarks: Information given is based on data obtained from similar substances.

# ORGANIC COMPOUND:

Result: Corrosive to eyes

# ORGANIC COMPOUND: Result: Corrosive to eyes

Components:

# BISPHENOL A-EPICHLOROHYDRIN POLYMER:

Result: Slightly irritating to eyes

# DIETHYLENE GLYCOL DI(AMINOPROPYL)ETHER:

Result: Corrosive to eyes

#### POLYOXYPROPYLENEDIAMINE:

Result: Corrosive to eyes

# POLY[OXY(METHYL-1,2-ETHANEDIYL)], .ALPHA.,.ALPHA.',.ALPHA."-1,2,3-

PROPANETRIYLTRIS[.OMEGA.-(2-AMINOMETHYLETHOXY)-:

Result: Corrosive to eyes

# 2-PROPENENITRILE, POLYMER WITH 1,3-BUTADIENE, 1-C:

Result: Irritating to eyes.

TALC:

Result: Possibly irritating to eyes

# 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL:

Result: Corrosive to eyes

# 3-(TRIMETHOXYSILYL)PROPYL GLYCIDYL ETHER:

Result: Irreversible effects on the eye

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#### Respiratory or skin sensitisation

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: Not classified based on available information.

Components: POLYMER:

Assessment: May cause sensitisation by skin contact.

POLYMER:

Species: Guinea pig

Assessment: May cause sensitisation by skin contact.

Method: OECD Test Guideline 406

ORGANIC COMPOUND:

Test Type: Local lymph node assay

Species: Mouse

Assessment: The product is a skin sensitiser, sub-category 1B.

Method: OECD Test Guideline 429

ORGANIC COMPOUND:

Test Type: Maximisation Test (GPMT)

Species: Guinea pig

Assessment: May cause sensitization by skin contact.

Method: OECD Test Guideline 406

#### Components:

BISPHENOL A-EPICHLOROHYDRIN POLYMER:

Test Type: Local lymph node assay Method: OECD Test Guideline 429

Result: The product is a skin sensitiser, sub-category 1B.

DIETHYLENE GLYCOL DI(AMINOPROPYL)ETHER: Assessment: May cause sensitization by skin contact.

2-PROPENENITRILE, POLYMER WITH 1,3-BUTADIENE, 1-C:

Test Type: Maximisation Test (GPMT)

Species: Guinea pig

Assessment: May cause sensitisation by skin contact.

Method: OECD Test Guideline 406

3-(TRIMETHOXYSILYL)PROPYL GLYCIDYL ETHER:

Species: Guinea pig

Assessment: Did not cause sensitisation on laboratory animals.

# Germ cell mutagenicity

Not classified based on available information.

**Components:** 

ORGANIC COMPOUND:

Genotoxicity in vitro : Test Type: Ames test

Test species: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

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**Components:** 

BISPHENOL A-EPICHLOROHYDRIN POLYMER:

Genotoxicity in vitro : Test Type: in vitro assay

Test species: Rodent cell line

Metabolic activation: without metabolic activation

Result: positive

Test Type: in vitro assay
Test species: Rodent cell line

Metabolic activation: with metabolic activation

Result: negative

: Test Type: Ames test

Metabolic activation: with and without metabolic activation

Result: negative

Genotoxicity in vivo : Test Type: in vivo assay

Test species: Mouse (male)
Application Route: Ingestion

Result: negative

POLYOXYPROPYLENEDIAMINE:

Genotoxicity in vitro : Test Type: Ames test

Test species: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Test Type: chromosome aberration assay

Test species: Mouse Cell type: Bone marrow

Method: OECD Test Guideline 474

Result: negative

3-(TRIMETHOXYSILYL)PROPYL GLYCIDYL ETHER:

Genotoxicity in vitro : Test Type: Ames test

Test species: Salmonella typhimurium

Metabolic activation: with and without metabolic activation Method: Mutagenicity (Salmonella typhimurium - reverse

mutation assay) Result: positive

: Test species: mouse lymphoma cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: positive

Test species: Chinese hamster ovary cells

Method: OECD Test Guideline 479

Result: positive

Genotoxicity in vivo : Test Type: In vivo micronucleus test

Test species: Mouse (male and female)

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Cell type: Bone marrow

Application Route: Intraperitoneal Method: OECD Test Guideline 474

Result: positive

# Carcinogenicity

Not classified based on available information.

# Reproductive toxicity

Not classified based on available information.

# STOT - single exposure

Not classified based on available information.

# STOT - repeated exposure

Not classified based on available information.

# Repeated dose toxicity

# **Components:**

**ORGANIC COMPOUND:** 

Species: Rat NOAEL: 152 mg/kg Application Route: Oral

Method: OECD Test Guideline 422

Species: Rat

NOAEL: 1,000 mg/kg Application Route: Dermal

Method: OECD Test Guideline 410

#### **Aspiration toxicity**

Not classified based on available information.

#### **Further information**

**Product:** 

Remarks: No data available

# Carcinogenicity:

IARC Group 2B: Possibly carcinogenic to humans

TALC 14807-96-6

OSHA No component of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by OSHA.

NTP No component of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

#### **SECTION 12. ECOLOGICAL INFORMATION**

# **Ecotoxicity**

# **Product:**

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**Ecotoxicology Assessment** 

Acute aquatic toxicity : Acute aquatic toxicity Category 2; Toxic to aquatic life.

Chronic aquatic toxicity : Chronic aquatic toxicity Category 2; Toxic to aquatic life with

long lasting effects.

POLYMER:

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Aquatic invertebrates): > 1,000 mg/l

Exposure time: 48 h

Remarks: Information given is based on data obtained from

similar substances.

: EC50 (Green algae): > 1,000 mg/l Toxicity to algae

Exposure time: 72 h

Remarks: Information given is based on data obtained from

similar substances.

ORGANIC COMPOUND:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.21 mg/l

> Exposure time: 96 h Test Type: semi-static test

Method: OECD Test Guideline 203

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Water flea (Daphnia magna)): 0.64 mg/l

Exposure time: 48 h Test Type: semi-static test

Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (microalgae)): 1.4 mg/l

> End point: Growth inhibition Exposure time: 72 h Test Type: semi-static test

Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (microalgae)): 0.11

ma/l

End point: Growth inhibition Exposure time: 72 h Test Type: semi-static test

Method: OECD Test Guideline 201

M-Factor (Acute aquatic

toxicity)

: 1

M-Factor (Chronic aquatic

toxicity)

ORGANIC COMPOUND:

Toxicity to fish : LC 50 (Fathead minnow (Pimephales promelas)): 2,190 mg/l

> Exposure time: 96 h Test Type: static test

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aquatic invertebrates

Toxicity to daphnia and other : EC50 (Water flea (Daphnia magna)): 58 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): >

1,000 mg/l

End point: Growth inhibition Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

BISPHENOL A-EPICHLOROHYDRIN POLYMER:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2.7 mg/l

> Exposure time: 96 h Test Type: semi-static test

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Water flea (Daphnia magna)): 2.8 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 4.2

Exposure time: 72 h

Toxicity to daphnia and other

aquatic invertebrates (Chronic toxicity)

: NOEC (Water flea (Daphnia magna)): 0.3 mg/l

Exposure time: 21 d Test Type: semi-static test

Method: OECD Test Guideline 211

DIETHYLENE GLYCOL DI(AMINOPROPYL)ETHER:

Toxicity to fish : LD 50 (Leuciscus idus (Golden orfe)): > 1,000 mg/l

> Exposure time: 96 h Test Type: static test

Test substance: Neutralised product

Method: DIN 38412

aquatic invertebrates

Toxicity to daphnia and other : EC 50 (Water flea (Daphnia magna)): 218.16 mg/l

Exposure time: 48 h Test Type: static test

Method: Directive 67/548/EEC, Annex V, C.2.

POLYOXYPROPYLENEDIAMINE:

Toxicity to fish : EC 50 (Oncorhynchus mykiss (rainbow trout)): 772 mg/l

> Exposure time: 96 h Test Type: semi-static test

Method: OECD Test Guideline 203

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Water flea (Daphnia magna)): 80 mg/l

Exposure time: 48 h Test Type: static test

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Method: OECD Test Guideline 202

Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (microalgae)): 15 mg/l

End point: Growth inhibition Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (microalgae)): 0.32

mg/l

End point: Growth inhibition Exposure time: 72 h Test Type: static test

Method: Directive 67/548/EEC, Annex V, C.3.

POLY[OXY(METHYL-1,2-ETHANEDIYL)], .ALPHA.,.ALPHA.',.ALPHA."-1,2,3-

PROPANETRIYLTRIS[.OMEGA.-(2-AMINOMETHYLETHOXY)-:

Toxicity to fish : LC50 (Fish): 68 mg/l

Exposure time: 96 h

2-PROPENENITRILE, POLYMER WITH 1,3-BUTADIENE, 1-C:

Toxicity to daphnia and other : EC50 (Aquatic invertebrates): > 1,000 mg/l

aquatic invertebrates Exposure time: 48 h

Toxicity to algae : EC50 (Green algae): > 1,000 mg/l

Exposure time: 72 h

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL:

Toxicity to fish : LC 50 (Oncorhynchus mykiss (rainbow trout)): > 180 - < 240

mg/l

Exposure time: 96 h Test Type: static test

Toxicity to algae : EC 50 (Desmodesmus subspicatus (green algae)): 84 mg/l

End point: Growth inhibition

Exposure time: 72 h

3-(TRIMETHOXYSILYL)PROPYL GLYCIDYL ETHER:

Toxicity to fish : LC50 (Cyprinus carpio (Carp)): 55 mg/l

Exposure time: 96 h
Test Type: semi-static test

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia (water flea)): 324 mg/l

Exposure time: 48 h Test Type: static test

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (microalgae)): 350

mg/l

Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other : NOEC (Daphnia (water flea)): 100 mg/l

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aquatic invertebrates Exposure time: 21 d (Chronic toxicity)

Persistence and degradability

POLYMER:

Biodegradability : Result: Not readily biodegradable.

ORGANIC COMPOUND:

Biodegradability : Result: Not readily biodegradable.

Biodegradation: 0 % Exposure time: 28 d

Method: OECD Test Guideline 301B

ORGANIC COMPOUND:

Biodegradability : aerobic

Inoculum: activated sludge Result: Not readily biodegradable.

Biodegradation: 0 % Exposure time: 28 d

Method: OECD Test Guideline 301F

BISPHENOL A-EPICHLOROHYDRIN POLYMER:

Biodegradability : Result: Not readily biodegradable.

Biodegradation: 5 % Exposure time: 28 d

Method: OECD Test Guideline 301F

Biodegradation: 82 % Exposure time: 28 d Method: Abiotic degradation

Physico-chemical

: Remarks: The product can be degraded by abiotic (e.g.

removability

chemical or photolytic) processes.

DIETHYLENE GLYCOL DI(AMINOPROPYL)ETHER:

Biodegradability : Result: Not readily biodegradable.

Biodegradation: < 10 % Exposure time: 60 d

Method: OECD Test Guideline 301B

POLYOXYPROPYLENEDIAMINE:

Biodegradability : Result: Not readily biodegradable.

Biodegradation: 0 % Exposure time: 28 d

Method: OECD Test Guideline 301B

POLY[OXY(METHYL-1,2-ETHANEDIYL)], .ALPHA.,.ALPHA.',.ALPHA."-1,2,3-

PROPANETRIYLTRIS[.OMEGA.-(2-AMINOMETHYLETHOXY)-:

Biodegradability : Result: Not readily biodegradable.

Biodegradation: < 5 % Exposure time: 28 d

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2-PROPENENITRILE, POLYMER WITH 1,3-BUTADIENE, 1-C: Biodegradability : Result: Not readily biodegradable.

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL:

Biodegradability : Result: Not readily biodegradable.

Biodegradation: 4 % Exposure time: 28 d

Method: OECD Test Guideline 301D

3-(TRIMETHOXYSILYL)PROPYL GLYCIDYL ETHER:

Biodegradability : aerobic

Result: Not readily biodegradable.

Biodegradation: 37 % Exposure time: 28 d

GLP: yes

Bioaccumulative potential

ORGANIC COMPOUND:

Bioaccumulation : Bioconcentration factor (BCF): < 7

Method: OECD Test Guideline 305C

Remarks: Information given is based on data obtained from

similar substances.

POLYOXYPROPYLENEDIAMINE:

Partition coefficient: n- : log Pow: 1.34

octanol/water Method: OECD Test Guideline 117

3-(TRIMETHOXYSILYL)PROPYL GLYCIDYL ETHER:

Partition coefficient: n- : log Pow: Estimated 0.5 (20 °C)

octanol/water

Mobility in soil

No data available

Other adverse effects

No data available

**Product:** 

Additional ecological

information

: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life with

long lasting effects.

# **SECTION 13. DISPOSAL CONSIDERATIONS**

Disposal methods

General advice : The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

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Send to a licensed waste management company.

Dispose of in accordance with all applicable local, state and

federal regulations.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product.

Empty containers should be taken to an approved waste

handling site for recycling or disposal. Do not re-use empty containers.

# **SECTION 14. TRANSPORT INFORMATION**

# International transport regulations

# REGULATION

	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
--	------------------	-----------------------	------------------	------------------------------------

#### U.S. DOT - ROAD

0.0					
UN	2735	Amines, liquid, corrosive, n.o.s. (ALIPHATIC AMINE, POLYOXYPROPYLENEDIAMI NE)	8	II	LIMITED QUANTITY

# U.S. DOT - RAIL

UN	2735	Amines, liquid, corrosive, n.o.s. (ALIPHATIC AMINE, POLYOXYPROPYLENEDIAMI NE)	8	II	LIMITED QUANTITY

# **U.S. DOT - INLAND WATERWAYS**

	UN	2735	Amines, liquid, corrosive, n.o.s. (ALIPHATIC AMINE, POLYOXYPROPYLENEDIAMI NE)	8	II	LIMITED QUANTITY
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# TRANSPORT CANADA - ROAD

UN	2735	AMINES, LIQUID,	8	II
		CORROSIVE, N.O.S.		
		(ALIPHATIC AMINE,		
		POLYOXYPROPYLENEDIAMI		
		NE)		
		,		

# TRANSPORT CANADA - RAIL

A		HLA	NU	<b>)</b>				Page: 24
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				•	•			
UN	2735	AMINES, LIQUID, CORROSIVE, N.C (ALIPHATIC AMIN POLYOXYPROPY NE)	IE,	8		II		
		NADA - INLAND W						
UN	2735	AMINES, LIQUID, CORROSIVE, N.C (ALIPHATIC AMIN POLYOXYPROPY NE)	).S. IE,	8		II		
		L MARITIME DANG						
UN	2735	AMINES, LIQUID, CORROSIVE, N.C (ALIPHATIC AMIN POLYOXYPROPY NE)	).S. IE,	8		II	PO BIS A- EP YD	RINE LLUTANT:( SPHENOL ICHLOROH RIN LYMER)
NTERN	IATIONAL	L AIR TRANSPORT		ON - CA	RGO			
UN	2735	Amines, liquid, cor (ALIPHATIC AMIN POLYOXYPROPY NE)	IE,	8		II		
	IATIONAI 2735	AIR TRANSPORT Amines, liquid, cor			SSENGER			
UN	2135	(ALIPHATIC AMIN POLYOXYPROPY NE)	IE,	8		11		
		LATION FOR THE I	AND TRANS	PORT	OF HAZARI	DOUS MATERIA	LS AND	
VASTE UN	2735	AMINAS LIQUIDA CORROSIVAS, N. (ALIPHATIC AMIN POLYOXYPROPY	E.P. IE,	8		11		
		NE)						
DRM =	ORM-D.	CBL = COMBUSTIE	BLE LIQUID					
								_
I N	/larine pol	lutant	yes					

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Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

#### **SECTION 15. REGULATORY INFORMATION**

**PART A** 

SARA 311/312 Hazards : Acute Health Hazard

SARA 313

Component(s)SARA 313

: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65 WARNING! This product contains a chemical known to the

State of California to cause cancer.

QUARTZ / SAND 14808-60-7

ACRYLONITRILE 107-13-1

1,3, BUTADIENE 106-99-0

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive

harm.

METHANOL 67-56-1

1,3, BUTADIENE 106-99-0

**PART B** 

SARA 311/312 Hazards : Acute Health Hazard

**SARA 313** 

Component(s)SARA 313

: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65 WARNING! This product contains a chemical known to the

State of California to cause cancer.

QUARTZ / SAND 14808-60-7

PROPYLENE OXIDE 75-56-9

The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory

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DSL : This product contains one or several components that are not

on the Canadian DSL and have annual quantity limits.

**AICS** : Not in compliance with the inventory

**ENCS** : Not in compliance with the inventory

: Not in compliance with the inventory KECI

**PICCS** : Not in compliance with the inventory

**IECSC** : Not in compliance with the inventory

# **Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

**Registration: Trade Secret** 

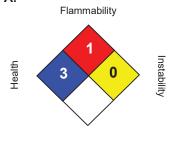
Chemical Name	Identification number
POLYMER	254504001-6320
POLYMER	254504001-6317
ORGANIC COMPOUND	254504001-6318
ORGANIC COMPOUND	254504001-6322

# **SECTION 16. OTHER INFORMATION**

# **Further information**

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**PART A** NFPA:



Special hazard.

#### HMIS III:

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,

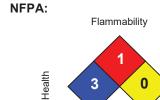
2 = Moderate, 3 = High 4 = Extreme, \* = Chronic

# NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

# **PART B**

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## HMIS III:

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, \* = Chronic

# NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

#### **Full text of H-Statements**

PART A

H314 H315 H317 H318	Causes severe skin burns and eye damage. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
PART B	
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Course skip invitation
11313	Causes skin irritation.
H317	May cause an allergic skin reaction.

Sources of key data used to compile the Safety Data Sheet Ashland internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet:

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ACGIH: American Conference of Industrial Hygienists

BEI: Biological Exposure Index

CAS: Chemical Abstracts Service (Division of the American Chemical Society).

CMR: Carcinogenic, Mutagenic or Toxic for Reproduction

FG: Food grade

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

H-statement : Hazard Statement

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization

ICAO-TI (ICAO): Technical Instructions by the "International Civil Aviation Organization"

IMDG: International Maritime Code for Dangerous Goods

ISO: International Organization for Standardization

logPow: octanol-water partition coefficient

LCxx: Lethal Concentration, for xx percent of test population

LDxx: Lethal Dose, for xx percent of test population. ICxx: Inhibitory Concentration for xx of a substance

Ecxx : Effective Concentration of xx N.O.S.: Not Otherwise Specified

OECD: Organization for Economic Co-operation and Development

OEL: Occupational Exposure Limit P-Statement: Precautionary Statement PBT: Persistent, Bioaccumulative and Toxic

PPE : Personal Protective Equipment STEL : Short-term exposure limit

STOT : Specific Target Organ Toxicity

TLV : Threshold Limit Value TWA : Time-weighted average

vPvB : Very Persistent and Very Bioaccumulative

WEL: Workplace Exposure Level

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

DOT: Department of Transportation

FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act HMIRC: Hazardous Materials Information Review Commission

HMIS: Hazardous Materials Identification System NFPA: National Fire Protection Association

NIOSH: National Institute for Occupational Safety and Health OSHA: Occupational Safety and Health Administration

PMRA: Health Canada Pest Management Regulatory Agency

RTK: Right to Know

WHMIS: Workplace Hazardous Materials Information System