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		SDS Number: 000000093520
PLIOGRIP PANEL 60-400 ML		Version: 1.1
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29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : PLIOGRIP PANEL 60-400 ML

Recommended use of the chemical and restrictions on use

Use of the Substance/Mixture : Adhesives
Industrial chemical

Details of the supplier of the safety data sheet Ashland P.O. Box 2219 Columbus, OH 43216 United States of America EHS Customer Requests@ashland.com	Emergency telephone number 1-800-ASHLAND (1-800-274-5263) Regulatory Information Number 1-800-325-3751 Product Information 614-790-3333
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SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Skin corrosion : Category 1A

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.

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Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves/ protective clothing/ eye protection/ face 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

Substance / Mixture : Mixture

Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
POLYMER	800986-5211P	Skin Sens. 1B; H317	>= 60.00 - < 70.00
NPG MODIFIED POLYMER	800986-5578P	Skin Irrit. 2; H315 Skin Sens. 1; H317	>= 10.00 - < 15.00
EPOXY RESIN SYSTEM MODIFIER	800986-5579P	Skin Irrit. 2; H315 Skin Sens. 1; H317	>= 10.00 - < 15.00

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

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CALCIUM METASILICATE	13983-17-0		8.10
TALC	14807-96-6	This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).	3.04

PART B

Substance / Mixture : Mixture

Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
CALCIUM COMPOUND	254504001-5840		>= 20.00 - < 30.00
ALIPHATIC DIAMINE	800986-5576P	Flam. Liq. 4; H227 Acute Tox. 4; H302 Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Corr. 1A; H314 Eye Dam. 1; H318 STOT SE 3; H335	>= 10.00 - < 15.00
PHYLOSILICATES	254504001-5903	This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).	>= 1.50 - < 5.00
ALIPHATIC AMINE	254504001-5601	Skin Corr. 1; H314 Eye Dam. 1; H318	>= 1.50 - < 5.00

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		Skin Sens. 1; H317	
EPOXY RESIN CURING AGENT	800986-5577P	Skin Corr. 1; H314 Eye Dam. 1; H318	>= 1.50 - < 5.00

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

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 INHALED: Call a POISON CENTER or doctor/ physician if you feel unwell.
Keep patient warm and at rest.
If unconscious place in recovery position and seek medical advice.
- 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)
Cough

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chest pain
 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
 acrid smoke and fumes
 Hydrogen
 formaldehyde
 acid vapors
 Ammonia
 carboxylic acids
 Nitrogen oxides (NO_x)
- 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.
- Special protective equipment for firefighters : 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.
 Ensure adequate ventilation.
 Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

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- 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 : Avoid formation of aerosol.
Provide sufficient air exchange and/or exhaust in work rooms.
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.
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.
Electrical installations / working materials must comply with the technological safety standards.

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	ACGIH

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		REL	fraction. 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
PHYLOSILICATES	254504001-5903	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

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

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

Hand protection
Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Wear chemical splash goggles and face shield when there is potential for exposure of the eyes or face to liquid, vapor or mist.
Maintain eye wash station in immediate work area.

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- 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

- Physical state : liquid
- Colour : white
- Odour : No data available
- Odour Threshold : No data available
- pH : No data available
- : No data available
- Boiling point/boiling range : 300.00 °F / 148.89 °C
 (1,013.333333 hPa)
 Calculated Phase Transition Liquid/Gas
- Flash point : > 230 °F / > 110 °C
- 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 : 1.3333333 hPa (20 °C)
 Calculated Vapor Pressure
- Relative vapour density : No data available
- Relative density : 1.12 (77.00 °F)

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Density : 1.12 g/cm³ (77.00 °F)

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

: No data available

Boiling point/boiling range : 270.5 °F / 132.5 °C
(1.333333 hPa)
Calculated Phase Transition Liquid/Gas

Flash point : > 200.1 °F / > 93.4 °C

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 : 173.3333333 hPa (135 °C)
Calculated Vapor Pressure

Relative vapour density : No data available

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Relative density : 1.1 (25 °C)

Density : 1.1 g/cm3 (25 °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 : excessive heat
Exposure to moisture

Incompatible materials : None known.
Acids
Amines
Bases
Oxidizing agents
water
Peroxides

Hazardous decomposition products : carbon dioxide and carbon monoxide
Hydrocarbons
Nitrogen oxides (NOx)
phenols
Ammonia

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SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation
Skin contact
Eye Contact
Ingestion

Acute toxicity

Not classified based on available information.

Components:

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.

ALIPHATIC DIAMINE:

Acute oral toxicity : LD50 (Rat, male): 1,690 mg/kg
Method: OECD Test Guideline 401
GLP: no

Acute inhalation toxicity : LC50 (Rat, male and female): 4.9 mg/l
Exposure time: 1 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
GLP: yes

Acute dermal toxicity : LD50 (Rat, male and female): 1,870 mg/kg
Method: OECD Test Guideline 402
GLP: no
Remarks: Information given is based on data obtained from similar substances.

NPG MODIFIED POLYMER:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Remarks: Information given is based on data obtained from similar substances.

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Remarks: Information given is based on data obtained from similar substances.

EPOXY RESIN SYSTEM MODIFIER:

Acute oral toxicity : LD50 (Rat): 4,500 mg/kg

Acute dermal toxicity : LD 50 (Rabbit): 2,150 mg/kg

ALIPHATIC AMINE:

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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

EPOXY RESIN CURING AGENT:

Acute oral toxicity : LD 50 (Rat): 2,169 mg/kg
Method: OECD Test Guideline 401

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: Slightly irritating to skin

CALCIUM COMPOUND:

Result: Slightly irritating to skin

ALIPHATIC DIAMINE:

Species: Rabbit

Method: OECD Test Guideline 404

Result: Corrosive after 3 minutes or less of exposure

NPG MODIFIED POLYMER:

Result: Irritating to skin

EPOXY RESIN SYSTEM MODIFIER:

Species: Rabbit

Result: Irritating to skin

PHYLOSILICATES:

Result: Possibly irritating to skin

ALIPHATIC AMINE:

Result: Corrosive to skin

EPOXY RESIN CURING AGENT:

Result: Corrosive to skin

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Remarks: May cause irreversible eye damage.

Components:

POLYMER:

Result: Slightly irritating to eyes

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CALCIUM COMPOUND:

Result: Slightly irritating to eyes

ALIPHATIC DIAMINE:

Species: Rabbit

Result: Corrosive to eyes

NPG MODIFIED POLYMER:

Result: Possibly irritating to eyes

EPOXY RESIN SYSTEM MODIFIER:

Result: Mildly irritating to eyes

PHYLOSILICATES:

Result: Possibly irritating to eyes

ALIPHATIC AMINE:

Result: Corrosive to eyes

EPOXY RESIN CURING AGENT:

Result: Corrosive to eyes

Respiratory or skin sensitisation

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: Not classified based on available information.

Components:

POLYMER:

Test Type: Local lymph node assay

Method: OECD Test Guideline 429

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

ALIPHATIC DIAMINE:

Species: Guinea pig

Assessment: Did not cause sensitisation on laboratory animals.

NPG MODIFIED POLYMER:

Assessment: May cause sensitisation by skin contact.

EPOXY RESIN SYSTEM MODIFIER:

Assessment: May cause sensitization by skin contact.

ALIPHATIC AMINE:

Assessment: May cause sensitization by skin contact.

Germ cell mutagenicity

Not classified based on available information.

Components:

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

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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

ALIPHATIC DIAMINE:
 Genotoxicity in vitro

: Test Type: Chromosome aberration test in vitro
 Test species: Human lymphocytes
 Metabolic activation: with and without metabolic activation
 Method: OECD Test Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
 Result: negative
 GLP: yes

: Test species: mouse lymphoma cells
 Metabolic activation: with and without metabolic activation
 Method: OECD Test Guideline 476
 Result: negative
 GLP: yes

Genotoxicity in vivo : Test Type: In vivo micronucleus test
 Test species: Mouse (male and female)
 Application Route: inhalation (dust/mist/fume)
 Method: OECD Test Guideline 474
 Result: negative
 GLP: yes
 Remarks: Information given is based on data obtained from similar substances.

EPOXY RESIN SYSTEM MODIFIER:

Genotoxicity in vitro : Test Type: Ames test
 Metabolic activation: with and without metabolic activation
 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.

Components:

ALIPHATIC DIAMINE:

Exposure routes: Inhalation

Target Organs: Respiratory Tract

Assessment: May cause respiratory irritation.

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STOT - repeated exposure

Not classified based on available information.

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

Components:

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 mg/l
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

ALIPHATIC DIAMINE:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 130 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 203

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GLP: yes

- Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia magna* (Water flea)): 50 mg/l
 Exposure time: 48 h
 Test Type: static test
 Method: EPA-660/3-75-009
 Remarks: Information given is based on data obtained from similar substances.
- Toxicity to algae : EC50 (*Pseudokirchneriella subcapitata* (green algae)): > 100 mg/l
 Exposure time: 72 h
 Test Type: static test
 Method: OECD Test Guideline 201
 Remarks: Information given is based on data obtained from similar substances.
- NOEC (*Pseudokirchneriella subcapitata* (green algae)): 10 mg/l
 Exposure time: 72 h
 Test Type: static test
 Method: OECD Test Guideline 201
 Remarks: Information given is based on data obtained from similar substances.
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (*Daphnia magna* (Water flea)): 4.16 mg/l
 Exposure time: 21 d
 End point: Reproduction Test
 Test Type: semi-static test
 Method: OECD Test Guideline 211
 GLP: yes
 Remarks: Information given is based on data obtained from similar substances.
- Toxicity to bacteria : EC20 (*Pseudomonas putida*): 30 mg/l
 End point: Growth rate
 Exposure time: 18 h
 Test Type: Static
- ALIPHATIC AMINE:
- 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
- Toxicity to daphnia and other aquatic invertebrates : 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.

EPOXY RESIN CURING AGENT:

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

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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

Persistence and degradability

Components:

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.

ALIPHATIC DIAMINE:

Biodegradability : Result: Readily biodegradable
 Biodegradation: 100 %
 Exposure time: 28 d
 Method: OECD Test Guideline 301D
 GLP: yes

EPOXY RESIN SYSTEM MODIFIER:

Biodegradability : Result: Not readily biodegradable.

ALIPHATIC AMINE:

Biodegradability : Result: Not readily biodegradable.
 Biodegradation: < 10 %
 Exposure time: 60 d
 Method: OECD Test Guideline 301B

EPOXY RESIN CURING AGENT:

Biodegradability : Result: Not readily biodegradable.
 Biodegradation: 4 %
 Exposure time: 28 d
 Method: OECD Test Guideline 301D

Bioaccumulative potential

Components:

ALIPHATIC DIAMINE:

Partition coefficient: n- : log Pow: <= 1 (25 °C)
 octanol/water pH: 9

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GLP: yes

Mobility in soil

Components:

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.

Components:

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.
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

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
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U.S. DOT - ROAD

UN	3267	Corrosive liquid, basic, organic, n.o.s. (POLYALKYLAMINE, 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)	8	II	LIMITED QUANTITY
----	------	--------------------------------------------------------------------------------------------------	---	----	------------------

U.S. DOT - RAIL

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UN	3267	Corrosive liquid, basic, organic, n.o.s. (POLYALKYLAMINE, 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)	8	II	LIMITED QUANTITY
----	------	--------------------------------------------------------------------------------------------------	---	----	------------------

U.S. DOT - INLAND WATERWAYS

UN	3267	Corrosive liquid, basic, organic, n.o.s. (POLYALKYLAMINE, 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)	8	II	LIMITED QUANTITY
----	------	--------------------------------------------------------------------------------------------------	---	----	------------------

TRANSPORT CANADA - ROAD

UN	3267	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (POLYALKYLAMINE, 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)	8	II	LIMITED QUANTITY
----	------	--------------------------------------------------------------------------------------------------	---	----	------------------

TRANSPORT CANADA - RAIL

UN	3267	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (POLYALKYLAMINE, 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)	8	II	LIMITED QUANTITY
----	------	--------------------------------------------------------------------------------------------------	---	----	------------------

TRANSPORT CANADA - INLAND WATERWAYS

UN	3267	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (POLYALKYLAMINE, 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)	8	II	LIMITED QUANTITY
----	------	--------------------------------------------------------------------------------------------------	---	----	------------------

INTERNATIONAL MARITIME DANGEROUS GOODS

UN	3267	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (POLYALKYLAMINE, 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)	8	II	MARINE POLLUTANT:(EPOXY RESIN)
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INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

UN	3267	Corrosive liquid, basic, organic, n.o.s. (POLYALKYLAMINE, 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)	8	II	
----	------	--------------------------------------------------------------------------------------------------	---	----	--

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INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

UN	3267	Corrosive liquid, basic, organic, n.o.s. (POLYALKYLAMINE, 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)	8	II
----	------	--------------------------------------------------------------------------------------------------	---	----

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

UN	3267	LIQUIDO CORROSIVO, BASICO, ORGANICO, N.E.P. (POLYALKYLAMINE, 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)	8	II
----	------	-----------------------------------------------------------------------------------------------------	---	----

***ORM = ORM-D, CBL = COMBUSTIBLE LIQUID**

Marine pollutant	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 birth defects or other reproductive harm.

EPICHLOROHYDRIN 106-89-8

WARNING! This product contains a chemical known to the State of California to cause cancer.

GLASS SPHERE 65997-17-3

QUARTZ / SAND 14808-60-7

EPICHLOROHYDRIN 106-89-8

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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.
 GLASS SPHERE 65997-17-3
 QUARTZ / SAND 14808-60-7

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

- TSCA : On TSCA Inventory
- DSL : This product contains one or several components that are not on the Canadian DSL and have annual quantity limits.
- AUSTR : On the inventory, or in compliance with the inventory
- ENCS : Exempt
- KECL : On the inventory, or in compliance with the inventory
- PICCS : Not in compliance with the inventory
- IECSC : On the inventory, or in compliance with the inventory

Inventories

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

Registration: Trade Secret

Chemical Name	Identification number
POLYMER	800986-5211P
CALCIUM COMPOUND	254504001-5840
ALIPHATIC DIAMINE	800986-5576P
NPG MODIFIED POLYMER	800986-5578P
EPOXY RESIN SYSTEM MODIFIER	800986-5579P
PHYLOSILICATES	254504001-5903
ALIPHATIC AMINE	254504001-5601
EPOXY RESIN CURING AGENT	800986-5577P

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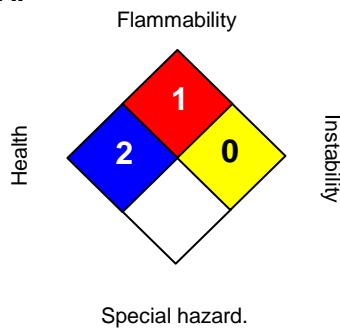
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SECTION 16. OTHER INFORMATION**Further information**

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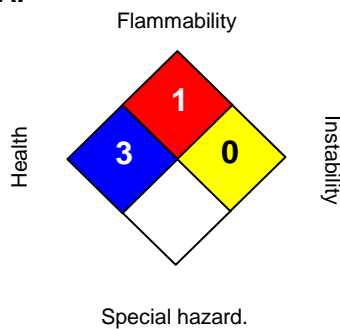
PART A**NFPA:****HMIS III:**

HEALTH	2*
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**NFPA:****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 referred to under sections 2 and 3.

PART A

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H227	Combustible liquid.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

PART B

H227	Combustible liquid.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

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 :

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

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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