29 CFR 1910.1200 (OSHA HazCom 2012)

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

**Product identifier**

Trade name : PANEL 60

**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** | **Emergency telephone number** |
|---|---|
| Ashland<br>P.O. Box 2219<br>Columbus, OH 43216<br>United States of America<br><br>EHS Customer Requests@ashland.com | 1-800-ASHLAND (1-800-274-5263)<br><br>**Regulatory Information Number**<br>1-800-325-3751<br><br>**Product Information**<br>614-790-3333 |

## 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.

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<br><br>Skin Sens. 1; H317 | >= 10.00 - < 15.00 |
| EPOXY RESIN SYSTEM MODIFIER | 800986-5579P | Skin Irrit. 2; H315<br><br>Skin Sens. 1; H317 | >= 10.00 - < 15.00 |

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

| | | | |
|---|---|---|---|
| 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<br><br>Acute Tox. 4; H302<br><br>Acute Tox. 4; H332<br><br>Acute Tox. 4; H312<br><br>Skin Corr. 1A; H314<br><br>Eye Dam. 1; H318<br><br>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<br><br>Eye Dam. 1; H318 | >= 1.50 - < 5.00 |

| | | | |
|---|---|---|---|
| | | Skin Sens. 1; H317 | |
| EPOXY RESIN CURING AGENT | 800986-5577P | Skin Corr. 1; H314<br><br>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.<br>Consult a physician.<br>Show this safety data sheet to the doctor in attendance.<br>Do not leave the victim unattended. |
| If inhaled | : | Move to fresh air.<br>IF INHALED: Call a POISON CENTER or doctor/ physician if you feel unwell.<br>Keep patient warm and at rest.<br>If unconscious place in recovery position and seek medical advice. |
| In case of skin contact | : | Remove contaminated clothing. If irritation develops, get medical attention.<br>If on skin, rinse well with water.<br>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.<br>Continue rinsing eyes during transport to hospital.<br>Remove contact lenses.<br>Protect unharmed eye. |
| If swallowed | : | Get medical attention immediately.<br>Do NOT induce vomiting.<br>Rinse mouth with water.<br>Do not give milk or alcoholic beverages.<br>Never give anything by mouth to an unconscious person.<br>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:<br>stomach or intestinal upset (nausea, vomiting, diarrhea)<br>irritation (nose, throat, airways)<br>Cough |

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 (NOx)

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.

| | | |
|---|---|---|
| Environmental precautions | : | Prevent product from entering drains.<br>Prevent further leakage or spillage if safe to do so.<br>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).<br>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.<br>Provide sufficient air exchange and/or exhaust in work rooms.<br>Do not breathe vapours/dust.<br>Do not smoke.<br>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.<br>Container hazardous when empty.<br>Avoid exposure - obtain special instructions before use.<br>Avoid contact with skin and eyes.<br>Smoking, eating and drinking should be prohibited in the application area.<br>For personal protection see section 8.<br>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.<br>Containers which are opened must be carefully resealed and kept upright to prevent leakage.<br>Observe label precautions.<br>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 |

| | | | | |
|---|---|---|---|---|
| | | | fraction. | |
| | | REL | 2 mg/m3 Respirable. | NIOSH/GUIDE |
| | | 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/GUIDE |
| | | 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.

| | | |
|---|---|---|
| Skin and body protection | : | Wear as appropriate:<br>impervious clothing<br>Chemical resistant apron<br>Safety shoes<br>Choose body protection according to the amount and concentration of the dangerous substance at the work place.<br>Discard gloves that show tears, pinholes, or signs of wear.<br>Wear resistant gloves (consult your safety equipment supplier). |
| Hygiene measures | : | Wash hands before breaks and at the end of workday.<br>When using do not eat or drink.<br>Ensure that eyewash stations and safety showers are close to the workstation location.<br>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<br>(1,013.333333 hPa)<br>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)<br>Calculated Vapor Pressure |
| Relative vapour density | : | No data available |
| Relative density | : | 1.12 (77.00 °F) |

| | | |
|---|---|---|
| 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<br>(1.333333 hPa)<br>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)<br>Calculated Vapor Pressure |
| Relative vapour density | : | No data available |

| | | |
|---|---|---|
| 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<br>Exposure to moisture |
| Incompatible materials | : | None known.<br>Acids<br>Amines<br>Bases<br>Oxidizing agents<br>water<br>Peroxides |
| Hazardous decomposition products | | carbon dioxide and carbon monoxide<br>Hydrocarbons<br>Nitrogen oxides (NOx)<br>phenols<br>Ammonia |

## 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**:**

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

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

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.

**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<br>Exposure time: 96 h<br>Test Type: semi-static test |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Water flea (Daphnia magna)): 2.8 mg/l<br>Exposure time: 48 h<br>Test Type: static test<br>Method: OECD Test Guideline 202 |
| Toxicity to algae | : | EC50 (Pseudokirchneriella subcapitata (green algae)): 4.2 mg/l<br>Exposure time: 72 h |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC (Water flea (Daphnia magna)): 0.3 mg/l<br>Exposure time: 21 d<br>Test Type: semi-static test<br>Method: OECD Test Guideline 211 |

ALIPHATIC DIAMINE**:**

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

GLP: yes

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

ALIPHATIC AMINE**:**

| | | |
|---|---|---|
| Toxicity to fish | : | LD 50 (Leuciscus idus (Golden orfe)): > 1,000 mg/l<br>Exposure time: 96 h<br>Test Type: static test<br>Test substance: Neutralised product<br>Method: DIN 38412 |
| Toxicity to daphnia and other aquatic invertebrates | : | EC 50 (Water flea (Daphnia magna)): 218.16 mg/l<br>Exposure time: 48 h<br>Test Type: static test<br>Method: Directive 67/548/EEC, Annex V, C.2. |

EPOXY RESIN CURING AGENT**:**

| | | |
|---|---|---|
| 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

**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 removability : Remarks: The product can be degraded by abiotic (e.g. 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-octanol/water : log Pow: <= 1 (25 °C)
pH: 9

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. |
|---|---|---|---|---|---|

**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**

| | | | | | |
|---|---|---|---|---|---|
| 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)LIMITED QUANTITY |

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

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

**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 |

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

**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), KECI (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 |

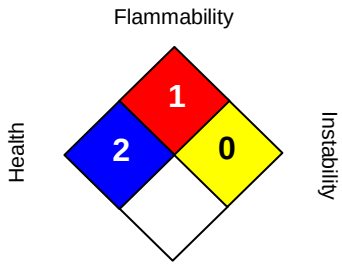
## SECTION 16. OTHER INFORMATION

**Further information**

Revision Date: 05/25/2015

**PART A**

**NFPA:**




**HMIS III:**

| | |
|---|---|
| **HEALTH** | **2*** |
| **FLAMMABILITY** | **1** |
| **PHYSICAL HAZARD** | **0** |

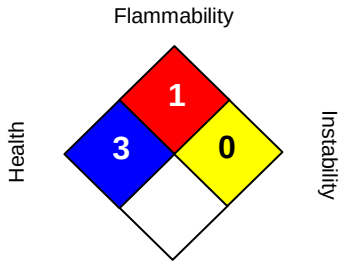
0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

**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**

| | |
|---|---|
| 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

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**