

**ARAFLOOR® PILGRIM 1 PART A**

Version	Revision Date:	SDS Number:	Date of last issue: 11/19/2015
1.1	02/25/2016	400001012822	Date of first issue: 11/19/2015

**SECTION 1. IDENTIFICATION**

Product name : ARAFLOOR® PILGRIM 1 PART A

**Manufacturer or supplier's details**

Company name of supplier : Huntsman Advanced Materials Americas LLC  
 Address : P.O. Box 4980  
 The Woodlands,  
 TX 77387  
 United States of America  
 Telephone : Non-Emergency: (800) 257-5547  
 E-mail address of person responsible for the SDS : MSDS@huntsman.com  
 Emergency telephone : Chemtrec: (800) 424-9300 or (703) 527-3887

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

Recommended use : Adhesives

**SECTION 2. HAZARDS IDENTIFICATION****GHS Classification**

Skin irritation : Category 2  
 Eye irritation : Category 2A  
 Skin sensitization : Category 1  
 Acute aquatic toxicity : Category 2  
 Chronic aquatic toxicity : Category 2

**GHS Label element**

Hazard pictograms :



Signal Word : Warning

Hazard Statements : H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H319 Causes serious eye irritation.  
 H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements : **Prevention:**  
 P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
 P264 Wash skin thoroughly after handling.

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P272 Contaminated work clothing must not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear eye protection/ face protection.

P280 Wear protective gloves.

**Response:**

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

P391 Collect spillage.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

None known.

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

Substance / Mixture : Mixture

**Hazardous ingredients**

Chemical Name	CAS-No.	Concentration (%)
Bisphenol A epoxy resin	25068-38-6	30 - 60
bisphenol F-epoxy resin	9003-36-5	13 - 30
1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane	17557-23-2	7 - 13
glycidylether of C12-C14 alcohols	68609-97-2	3 - 7
[[[2-ethylhexyl)oxy]methyl]oxirane	2461-15-6	3 - 7
Alcohols, C12-13, ethoxylated	66455-14-9	3 - 7
Alcohols, C10-16, ethoxylated, sulfates, sodium salts	68585-34-2	1 - 3

**SECTION 4. FIRST AID MEASURES**

General advice : Move out of dangerous area.  
Show this material safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.

If inhaled : If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.

In case of skin contact : If skin irritation persists, call a physician.  
If on skin, rinse well with water.  
If on clothes, remove clothes.

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- |   |   |
|---|---|
| In case of eye contact                                      | : Immediately flush eye(s) with plenty of water.<br>Remove contact lenses.<br>Protect unharmed eye.<br>Keep eye wide open while rinsing.<br>If eye irritation persists, consult a specialist.   |
| If swallowed  | : Clean mouth with water and drink afterwards plenty of water.<br>Keep respiratory tract clear.<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 | : None known.   |

**SECTION 5. FIRE-FIGHTING MEASURES**

- |  |   |
|--|---|
| Suitable extinguishing media                   | : No data is available on the product itself.   |
| Unsuitable extinguishing media                 | : High volume water jet   |
| Specific hazards during fire fighting          | : Do not allow run-off from fire fighting to enter drains or water courses.   |
| Hazardous combustion products                  | : No data is available on the product itself.   |
| Specific extinguishing methods                 | : No data is available on the product itself.   |
| Further information                            | : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.<br>Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |
| Special protective equipment for fire-fighters | : Wear self-contained breathing apparatus for firefighting if necessary.  |

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- |   |   |
|---|---|
| Personal precautions, protective equipment and emergency procedures | : Use personal protective equipment.  |
| 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.                             |

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**SECTION 7. HANDLING AND STORAGE**

- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Advice on safe handling : Do not breathe vapors/dust.  
 Avoid exposure - obtain special instructions before use.  
 Avoid contact with skin and eyes.  
 For personal protection see section 8.  
 Smoking, eating and drinking should be prohibited in the application area.  
 Dispose of rinse water in accordance with local and national regulations.  
 Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
- 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.  
 Electrical installations / working materials must comply with the technological safety standards.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Personal protective equipment**

- Respiratory protection : No personal respiratory protective equipment normally required.
- Hand protection  
 Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye protection : Eye wash bottle with pure water  
 Tightly fitting safety goggles.  
 Wear face-shield and protective suit for abnormal processing problems.
- Skin and body protection : impervious clothing  
 Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Hygiene measures : When using do not eat or drink.  
 When using do not smoke.  
 Wash hands before breaks and at the end of workday.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	: liquid
Color	: light yellow
Odor	: epoxy-like
Odor Threshold	: No data is available on the product itself.
pH	: No data is available on the product itself.
Boiling point	: > 200 °C
Flash point	: > 93.33 °C Method: estimated, closed cup
Evaporation rate	: No data is available on the product itself.
Flammability (solid, gas)	: No data is available on the product itself.
Upper explosion limit	: No data is available on the product itself.
Lower explosion limit	: No data is available on the product itself.
Vapor pressure	: No data is available on the product itself.
Relative vapor density	: No data is available on the product itself.
Relative density	: 1.13
Density	: No data is available on the product itself.
Solubility(ies)	
Water solubility	: soluble
Solubility in other solvents	: No data is available on the product itself.
Partition coefficient: n-octanol/water	: No data is available on the product itself.
Autoignition temperature	: No data is available on the product itself.
Thermal decomposition	: No data is available on the product itself.
Viscosity	: No data is available on the product itself.
Self-Accelerating decomposition temperature (SADT)	: No data is available on the product itself.

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: No decomposition if stored and applied as directed.



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Possibility of hazardous reactions : No decomposition if stored and applied as directed.  
Conditions to avoid : No data available

**SECTION 11. TOXICOLOGICAL INFORMATION**

Information on likely routes of exposure : No data is available on the product itself.

**Acute toxicity**

Acute oral toxicity - Product : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method

**Ingredients:**

glycidylether of C12-C14 alcohols:

Acute inhalation toxicity : LC0 (Rat): > 0.15 mg/l  
Exposure time: 7 h  
Test atmosphere: vapor

[[[(2-ethylhexyl)oxy]methyl]oxirane:

Acute inhalation toxicity : LC0 (Rat): > 0.15 mg/l  
Exposure time: 7 h  
Test atmosphere: vapor

Acute dermal toxicity - Product : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method

Acute toxicity (other routes of administration) : No data available

**Skin corrosion/irritation****Product:**

Remarks: May cause skin irritation and/or dermatitis.

**Serious eye damage/eye irritation****Product:**

Remarks: May cause irreversible eye damage.

**Respiratory or skin sensitization****Product:**

Remarks: Causes sensitization.

Assessment: No data available

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**Germ cell mutagenicity****Ingredients:**

Bisphenol A epoxy resin:  
Genotoxicity in vitro : Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 476  
Result: positive

Concentration: 0 - 5000 ug/plate  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 471  
Result: positive

bisphenol F-epoxy resin:  
Genotoxicity in vitro : Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 471  
Result: positive

Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 473  
Result: positive

Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 476  
Result: positive

1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane:  
Genotoxicity in vitro : Metabolic activation: negative  
Method: OECD Test Guideline 471  
Result: positive

glycidylether of C12-C14 alcohols:  
Genotoxicity in vitro : Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 476  
Result: negative

[[[(2-ethylhexyl)oxy]methyl]oxirane:  
Genotoxicity in vitro : Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 476  
Result: negative

Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 471  
Result: positive

**Ingredients:**

Bisphenol A epoxy resin:  
Genotoxicity in vivo : Cell type: Germ  
Application Route: Oral  
Method: OECD Test Guideline 478  
Result: negative

Cell type: Somatic  
Application Route: Oral  
Dose: 0 - 5000 mg/kg  
Method: OPPTS 870.5395

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Result: negative

bisphenol F-epoxy resin:  
Genotoxicity in vivo: Cell type: Somatic  
Application Route: Oral  
Exposure time: 48 h  
Dose: 2000 mg/kg  
Method: OECD Test Guideline 474  
Result: negativeCell type: Somatic  
Application Route: Oral  
Dose: 2000 mg/kg  
Method: OECD Test Guideline 486  
Result: negative

1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane:

Genotoxicity in vivo : Method: OECD Test Guideline 474  
Result: negative

glycidylether of C12-C14 alcohols:

Genotoxicity in vivo : Cell type: Somatic  
Application Route: Intraperitoneal injection  
Method: OECD Test Guideline 474  
Result: negative

[[[(2-ethylhexyl)oxy]methyl]oxirane:

Genotoxicity in vivo : Application Route: Intraperitoneal injection  
Method: OECD Test Guideline 474  
Result: negative**Ingredients:**Bisphenol A epoxy resin:  
Germ cell mutagenicity-  
Assessment: Weight of evidence does not support classification as a germ  
cell mutagen.Germ cell mutagenicity-  
Assessment

: No data available

**Carcinogenicity****Ingredients:**Bisphenol A epoxy resin:  
Species: Rat, (male and female)  
Application Route: Oral  
Exposure time: 24 month(s)  
Dose: 15 mg/kg  
Frequency of Treatment: 7 days/week  
Method: OECD Test Guideline 453  
Result: negativeSpecies: Mouse, (male)  
Application Route: Dermal  
Exposure time: 24 month(s)



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Dose: 0.1 mg/kg  
 Frequency of Treatment: 3 days/week  
 Method: OECD Test Guideline 453  
 Result: negative

Species: Rat, (female)  
 Application Route: Dermal  
 Exposure time: 24 month(s)  
 Dose: 1 mg/kg  
 Frequency of Treatment: 5 days/week  
 Method: OECD Test Guideline 453  
 Result: negative

1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane:  
 Species: Mouse, (male and female)  
 Application Route: Dermal  
 Exposure time: 24 month(s)  
 Dose: 30 mg/kg  
 Frequency of Treatment: 3 daily  
 Result: Not classified due to inconclusive data.  
 Target Organs: Skin

Carcinogenicity - Assessment : No data available

**IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA** No ingredient 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 ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**Reproductive toxicity****Ingredients:**

Bisphenol A epoxy resin:  
 Effects on fertility : Test Type: Two-generation study  
 Species: Rat, male and female  
 Application Route: Oral  
 Dose: >750 milligram per kilogram  
 General Toxicity Parent: No-observed-effect level: 540 mg/kg body weight  
 General Toxicity F1: No-observed-effect level: 540 mg/kg body weight  
 Symptoms: No adverse effects.  
 Method: OECD Test Guideline 416  
 Result: No effects on fertility and early embryonic development were detected.

bisphenol F-epoxy resin: Species: Rat, male and female

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Application Route: Oral  
Method: OECD Test Guideline 416  
Result: No effects on fertility and early embryonic development were detected.

[[[2-ethylhexyl)oxy)methyl]oxirane:

Species: Rat, female  
Application Route: Dermal  
Result: No effects on fertility and early embryonic development were detected.

Alcohols, C12-13, ethoxylated:

Species: Rat, male and female

**Ingredients:**

Bisphenol A epoxy resin:

Effects on fetal development

: Species: Rabbit, female  
Application Route: Dermal  
General Toxicity Maternal: NOAEL (No observed adverse effect level): 30 mg/kg body weight  
Method: Other guidelines  
Result: No teratogenic effects.

Species: Rabbit, female  
Application Route: Oral  
General Toxicity Maternal: NOAEL (No observed adverse effect level): 60 mg/kg body weight  
Method: OECD Test Guideline 414  
Result: No teratogenic effects.

Species: Rat, female  
Application Route: Oral  
General Toxicity Maternal: NOAEL (No observed adverse effect level): 180 mg/kg body weight  
Method: OECD Test Guideline 414  
Result: No teratogenic effects.

bisphenol F-epoxy resin:

Species: Rabbit, female  
Application Route: Dermal  
General Toxicity Maternal: NOAEL (No observed adverse effect level): 30 mg/kg body weight  
Result: No teratogenic effects.

glycidylether of C12-C14 alcohols:

Species: Rat, female  
Application Route: Dermal  
General Toxicity Maternal: No-observed-effect level: 200 mg/kg body weight  
Method: OECD Test Guideline 414  
Result: No teratogenic effects.

[[[2-ethylhexyl)oxy)methyl]oxirane:

Species: Rat  
Application Route: Dermal  
General Toxicity Maternal: NOAEL (No observed adverse

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effect level): > 200 mg/kg body weight  
Method: OECD Test Guideline 414  
Result: No teratogenic effects.

Reproductive toxicity - Assessment : No data available

**STOT-single exposure**

No data available

**STOT-repeated exposure**

No data available

**Repeated dose toxicity****Ingredients:**

Bisphenol A epoxy resin:  
Species: Rat, male and female  
NOAEL (No observed adverse effect level): 50 mg/kg  
Application Route: Ingestion  
Exposure time: 14 Weeks  
Number of exposures: 7 d  
Method: Subchronic toxicity

Species: Rat, male and female  
No-observed-effect level: 10 mg/kg  
Application Route: Skin contact  
Exposure time: 13 Weeks  
Number of exposures: 5 d  
Method: Subchronic toxicity

Species: Mouse, male  
NOAEL (No observed adverse effect level): 100 mg/kg  
Application Route: Skin contact  
Exposure time: 13 Weeks  
Number of exposures: 3 d  
Method: Subchronic toxicity

bisphenol F-epoxy resin:  
Species: Rat, male and female  
NOAEL (No observed adverse effect level): 250 mg/kg  
Application Route: Ingestion  
Exposure time: 13 Weeks  
Number of exposures: 7 d  
Method: Subchronic toxicity

1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane:  
Species: Mouse, male and female  
Lowest observable effect level: 30 mg/kg  
Application Route: Skin contact  
Exposure time: 17,280 h  
Number of exposures: 3 d

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Method: Chronic toxicity

glycidylether of C12-C14 alcohols:

Species: Rat, male and female

No-observed-effect level: 1 mg/kg/d

Application Route: Skin contact

Exposure time: 13 Weeks

Number of exposures: 5 d

Method: Subchronic toxicity

[[2-ethylhexyl]oxy]methyl]oxirane:

Species: Rat, male and female

NOAEL (No observed adverse effect level): 100 mg/kg/d

Application Route: Skin contact

Exposure time: 13 Weeks

Number of exposures: 5 d

Method: Subchronic toxicity

Repeated dose toxicity - Assessment : No data available

**Aspiration toxicity**

No data available

**Experience with human exposure**

General Information: No data available

Inhalation: No data available

Skin contact: No data available

Eye contact: No data available

Ingestion: No data available

**Toxicology, Metabolism, Distribution**

No data available

**Neurological effects**

No data available

**Further information****Product:**

Remarks: No data available

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**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Ingredients:**

Bisphenol A epoxy resin:  
Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1.5 mg/l  
Exposure time: 96 h  
Test Type: static test  
Test substance: Fresh water  
Method: OECD Test Guideline 203

bisphenol F-epoxy resin:  
Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.55 mg/l  
Exposure time: 96 h  
Test Type: semi-static test  
Test substance: Fresh water  
Method: OECD Test Guideline 203

glycidylether of C12-C14 alcohols:  
Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 5,000 mg/l  
Exposure time: 96 h  
Test Type: static test  
Test substance: Fresh water  
Method: OECD Test Guideline 203

[[[(2-ethylhexyl)oxy]methyl]oxirane:  
Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 5,000 mg/l  
Exposure time: 96 h  
Test Type: static test  
Test substance: Fresh water  
Method: OECD Test Guideline 203

**Ingredients:**

Bisphenol A epoxy resin:  
Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2.7 mg/l  
Exposure time: 48 h  
Test Type: static test  
Test substance: Fresh water

bisphenol F-epoxy resin:  
Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.6 mg/l  
Exposure time: 48 h  
Test Type: static test  
Test substance: Fresh water  
Method: OECD Test Guideline 202

glycidylether of C12-C14 alcohols:  
Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 7.2 mg/l  
Exposure time: 48 h  
Test Type: static test  
Test substance: Fresh water  
Method: OECD Test Guideline 202

[[[(2-ethylhexyl)oxy]methyl]oxirane:



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Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 7.2 mg/l  
 Exposure time: 48 h  
 Test Type: static test  
 Test substance: Fresh water  
 Method: OECD Test Guideline 202

**Ingredients:**

Bisphenol A epoxy resin:  
 Toxicity to algae : EC50 (Selenastrum capricornutum (green algae)): 9.4 mg/l  
 Exposure time: 72 h  
 Test Type: static test  
 Test substance: Fresh water  
 Method: EPA-660/3-75-009

bisphenol F-epoxy resin:  
 Toxicity to algae : EC50 (Selenastrum capricornutum (green algae)): 1.8 mg/l  
 Exposure time: 72 h  
 Test Type: static test  
 Test substance: Fresh water  
 Method: OECD Test Guideline 201

glycidylether of C12-C14 alcohols:  
 Toxicity to algae : IC50 (Selenastrum capricornutum (green algae)): 843.75 mg/l  
 Exposure time: 72 h  
 Test Type: static test  
 Test substance: Fresh water  
 Method: OECD Test Guideline 201

[[[2-ethylhexyl)oxy]methyl]oxirane:  
 Toxicity to algae : IC50 (Selenastrum capricornutum (green algae)): 843.75 mg/l  
 Exposure time: 72 h  
 Test Type: static test  
 Test substance: Fresh water  
 Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : No data available

Toxicity to fish (Chronic toxicity) : No data available

**Ingredients:**

Bisphenol A epoxy resin:  
 Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.3 mg/l  
 Exposure time: 21 d  
 Test Type: semi-static test  
 Test substance: Fresh water  
 Method: OECD Test Guideline 211

bisphenol F-epoxy resin:  
 Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.3 mg/l  
 Exposure time: 21 d  
 Test Type: semi-static test  
 Test substance: Fresh water  
 Method: OECD Test Guideline 211

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M-Factor (Chronic aquatic toxicity) : No data available

**Ingredients:**

Bisphenol A epoxy resin:  
Toxicity to bacteria : IC50 (activated sludge): > 100 mg/l  
Exposure time: 3 h  
Test Type: static test  
Test substance: Fresh water

bisphenol F-epoxy resin:  
Toxicity to bacteria : IC50 (activated sludge): > 100 mg/l  
Exposure time: 3 h  
Test Type: static test  
Test substance: Fresh water

glycidylether of C12-C14 alcohols:  
Toxicity to bacteria : IC50: > 100 mg/l  
Exposure time: 3 h  
Method: OECD Test Guideline 209

Toxicity to soil dwelling organisms : No data available

Plant toxicity : No data available

Sediment toxicity : No data available

Toxicity to terrestrial organisms : No data available

**Ecotoxicology Assessment****Ingredients:**

bisphenol F-epoxy resin:  
Acute aquatic toxicity : This product has no known ecotoxicological effects.

**Ingredients:**

bisphenol F-epoxy resin:  
Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Toxicity Data on Soil : No data available

Other organisms relevant to the environment : No data available

Further information:  
No data available

**Persistence and degradability****Ingredients:**

Bisphenol A epoxy resin:  
Biodegradability : Inoculum: Sewage (STP effluent)

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Concentration: 20 mg/l  
 Result: Not readily biodegradable.  
 Biodegradation: 5 %  
 Exposure time: 28 d  
 Method: OECD Test Guideline 301F

bisphenol F-epoxy resin:  
 Biodegradability

: Inoculum: activated sludge  
 Concentration: 3 mg/l  
 Result: Not readily biodegradable.  
 Biodegradation: ca. 0 %  
 Exposure time: 28 d  
 Method: Directive 67/548/EEC Annex V, C.4.E.

glycidylether of C12-C14 alcohols:  
 Biodegradability

: Inoculum: Domestic sewage  
 Concentration: 100 mg/l  
 Result: Readily biodegradable.  
 Biodegradation: 87 %  
 Exposure time: 28 d  
 Method: OECD Test Guideline 301F

[[[(2-ethylhexyl)oxy)methyl]oxirane:  
 Biodegradability

: Inoculum: activated sludge  
 Concentration: 100 mg/l  
 Result: Not readily biodegradable.  
 Biodegradation: 0 %  
 Exposure time: 28 d  
 Method: OECD Test Guideline 301F

Biochemical Oxygen  
 Demand (BOD)

: No data available

Chemical Oxygen Demand  
 (COD)

: No data available

BOD/COD

: No data available

ThOD

: No data available

BOD/ThOD

: No data available

Dissolved organic carbon  
 (DOC)

: No data available

Physico-chemical  
 removability

: No data available

Stability in water

: No data available

Photodegradation

: No data available

Impact on Sewage  
 Treatment

: No data available

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**Bioaccumulative potential****Ingredients:**

Bisphenol A epoxy resin:  
Bioaccumulation : Bioconcentration factor (BCF): 31  
Remarks: Does not bioaccumulate.

bisphenol F-epoxy resin:  
Bioaccumulation : Species: Fish  
Bioconcentration factor (BCF): 150  
Remarks: Does not bioaccumulate.

**Ingredients:**

Bisphenol A epoxy resin:  
Partition coefficient: n-  
octanol/water : log Pow: 3.242 (25 °C)  
pH: 7.1  
Method: OECD Test Guideline 117

bisphenol F-epoxy resin:  
Partition coefficient: n-  
octanol/water : log Pow: 2.7 - 3.6  
Method: OECD Test Guideline 117

glycidylether of C12-C14 alcohols:  
Partition coefficient: n-  
octanol/water : log Pow: 3.77 (20 °C)  
Method: OECD Test Guideline 107

[[[(2-ethylhexyl)oxy]methyl]oxirane:  
Partition coefficient: n-  
octanol/water : log Pow: 3.83  
pH: 6.34  
Method: OECD Test Guideline 117

**Mobility in soil**

Mobility : No data available

**Ingredients:**

Bisphenol A epoxy resin:  
Distribution among  
environmental compartments : Koc: 445.

bisphenol F-epoxy resin:  
Distribution among  
environmental compartments : Koc: 4460. Method: OECD Test Guideline 121

[[[(2-ethylhexyl)oxy]methyl]oxirane:  
Distribution among  
environmental compartments : Koc: > 426580. Method: OECD Test Guideline 121

Stability in soil : No data available

**Other adverse effects**

Environmental fate and  
pathways : No data available

Results of PBT and vPvB  
assessment : No data available

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Endocrine disrupting potential : No data available

Adsorbed organic bound halogens (AOX) : No data available

**Hazardous to the ozone layer**

Ozone-Depletion Potential : Not applicable

Additional ecological information - Product : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Toxic to aquatic life with long lasting effects.

Global warming potential (GWP) : No data available

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : 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.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.

**SECTION 14. TRANSPORT INFORMATION****International Regulation****IATA**

UN/ID No. : UN 3082  
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.  
(BISPHENOL A EPOXY RESIN, BISPHENOL F EPOXY RESIN)  
Class : 9  
Packing group : III  
Labels : Miscellaneous  
Packing instruction (cargo aircraft) : 964  
Packing instruction (passenger aircraft) : 964

**IMDG**

UN number : UN 3082



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Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(BISPHENOL A EPOXY RESIN, BISPHENOL F EPOXY RESIN)

Class : 9

Packing group : III

Labels : 9

EmS Code : F-A, S-F

Marine pollutant : yes

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**Domestic regulation****DOT Classification**

UN/ID/NA number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(BISPHENOL A EPOXY RESIN, 2-ETHYLHEXYL-GLYCIDYLETHER)

Class : 9

Packing group : III

Labels : CLASS 9

ERG Code : 171

Marine pollutant : yes(BISPHENOL A EPOXY RESIN, BISPHENOL F EPOXY RESIN)

Remarks : Above applies only to containers over 119 gallons or 450 liters. Not regulated if shipped in packages less than or equal to 119 gallons (450 liters).

**SECTION 15. REGULATORY INFORMATION**

**TSCA - 5(a) Significant New Use Rule List of Chemicals** : Not relevant

**EPCRA - Emergency Planning and Community Right-to-Know**

**SARA 311/312 Hazards** : Acute Health Hazard

**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** : This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

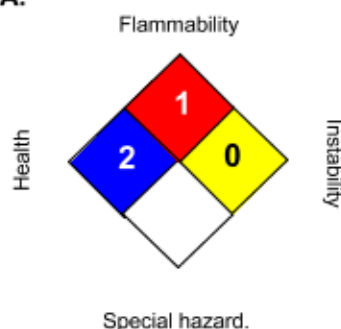
**The ingredients of this product are reported in the following inventories:**

CH INV : The mixture contains substances listed on the Swiss Inventory

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TSCA : On TSCA Inventory  
 DSL : All components of this product are on the Canadian DSL.  
 AICS : On the inventory, or in compliance with the inventory  
 NZIoC : Not in compliance with the inventory  
 ENCS : Not in compliance with the inventory  
 ISHL : Not in compliance with the inventory  
 KECI : On the inventory, or in compliance with the inventory  
 PICCS : On the inventory, or in compliance with the inventory  
 IECSC : On the inventory, or in compliance with the inventory

**SECTION 16. OTHER INFORMATION****Further information****NFPA:****HMIS III:**

<b>HEALTH</b>	<b>2</b>
<b>FLAMMABILITY</b>	<b>1</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High

4 = Extreme, \* = Chronic

Revision Date : 02/25/2016

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Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.

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