

ARAFLOOR® PILGRIM 1 PART B

Version 2.0 Revision Date: 09/10/2015 SDS Number: 400001012820 Date of last issue: 09/10/2015
Date of first issue: 09/10/2015

SECTION 1. IDENTIFICATION

Product name : ARAFLOOR® PILGRIM 1 PART B

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

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Acute toxicity (Oral) : Category 4
Skin corrosion : Category 1A
Serious eye damage : Category 1
Skin sensitization : Category 1
Acute aquatic toxicity : Category 3
Chronic aquatic toxicity : Category 3

GHS Label element

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H412 Harmful 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.
P270 Do not eat, drink or smoke when using this product.

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P272 Contaminated work clothing must not be allowed out of the workplace.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
 P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
 P305 + P351 + P338 + P310 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.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
 P363 Wash contaminated clothing before reuse.

Storage:

P405 Store locked up.

Disposal:

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

Other hazards

None known.

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

Chemical Name	CAS-No.	Concentration (%)
benzyl alcohol	100-51-6	30 - 60
1,3-Cyclohexanedimethanamine	2579-20-6	13 - 30
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5	68609-08-5	13 - 30
Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-	2855-13-2	13 - 30
N,N,N',N',N'',N''-hexamethyl-1,3,5-triazine-1,3,5(2H,4H,6H)-tripropanamine	15875-13-5	3 - 7
3-aminopropyl-dimethylamine	109-55-7	0.1 - 1

SECTION 4. FIRST AID MEASURES

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

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- If inhaled : If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
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.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.
- 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 hazardous combustion products are known
- 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.
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.

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SECTION 6. ACCIDENTAL RELEASE MEASURES

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

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. To avoid spills during handling keep bottle on a metal tray. 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. Observe label precautions. 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.

Hazardous components without workplace control parameters

Ingredients	CAS-No.
100-51-6	BENZYL

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2579-20-6	ALCOHOL 1,3-CYCLOHEXANEDIMETHANAMINE
68609-08-5	4,4'-ISOPROPYLIDENEDIPHENOL, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE, REACTION PRODUCTS WITH 3-AMINOMETHYL-3,5,5
2855-13-2	ISOPHORONE DIAMINE
15875-13-5	N,N,N',N',N'',N''-HEXAMETHYL-1,3,5-TRIAZINE-1,3,5(2H,4H,6H)-TRIPROPANAMINE
109-55-7	N,N-DIMETHYLAMINOPROPYLAMINE (DMAPA)

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.

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Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Color : light yellow

Odor : amine-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 : 0.06665 hPa (20 °C)

Relative vapor density : No data is available on the product itself.

Relative density : 1.04

Density : No data is available on the product itself.

Solubility(ies)

Water solubility : insoluble

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 : No data is available on the product itself.

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SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: The product is chemically stable.
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 : 1,407 mg/kg
Method: Calculation method

Ingredients:

benzyl alcohol:

Acute inhalation toxicity : LC50 (Rat, male and female): > 4178 mg/m³
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

3-aminopropyldimethylamine:

Acute inhalation toxicity : LC50 (Rat, male and female): 24.8 mg/l
Exposure time: 2 h
Test atmosphere: vapor
Method: OECD Test Guideline 403

Acute dermal toxicity - Product : Acute toxicity estimate : 4,093 mg/kg
Method: Calculation method

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

Skin corrosion/irritation**Product:**

Remarks: Extremely corrosive and destructive to tissue.

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

Remarks: May cause irreversible eye damage.

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Respiratory or skin sensitization**Product:**

Remarks: Causes sensitization.

Ingredients:

3-aminopropyldimethylamine:

Assessment: May cause sensitization by skin contact.

Germ cell mutagenicity**Ingredients:**

1,3-Cyclohexanedimethanamine:

Genotoxicity in vitro : Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: positiveMetabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

N,N,N',N',N'',N''-hexamethyl-1,3,5-triazine-1,3,5(2H,4H,6H)-tripropanamine:

Genotoxicity in vitro : Concentration: 15.63 - 250 µg/L
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negativeMetabolic activation: with and without metabolic activation
Method: OECD Test Guideline 474
Result: negative

3-aminopropyldimethylamine:

Genotoxicity in vitro : Concentration: 0 - 300 µg/L
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negativeConcentration: 0 - 10000 ug/plate
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negativeConcentration: 0 - 715.4 µg/L
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative**Ingredients:**

benzyl alcohol:

Genotoxicity in vivo : Application Route: Intraperitoneal injection
Dose: 200 mg/kg
Method: OECD Test Guideline 474
Result: negative

1,3-Cyclohexanedimethanamine:

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Genotoxicity in vivo : Application Route: Oral
Method: OECD Test Guideline 474
Result: negative

3-aminopropyl dimethylamine:
Genotoxicity in vivo : Application Route: Intraperitoneal injection
Dose: 0 - 100 mg/kg
Method: OECD Test Guideline 474
Result: negative

Carcinogenicity**Ingredients:**

benzyl alcohol:
Species: Rat, (male and female)
Application Route: Oral
Exposure time: 103 weeks
Dose: 400 mg/kg
Frequency of Treatment: 5 daily
Method: OECD Test Guideline 453
Result: negative

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:**

1,3-Cyclohexanedimethanamine:
Effects on fertility : Species: Rat, male and female
Application Route: Oral
Method: OECD Test Guideline 422

Ingredients:

benzyl alcohol:
Effects on fetal development : Species: Mouse, female
Application Route: Oral
General Toxicity Maternal: LOAEL (Lowest observed adverse effect level): 550 mg/kg body weight
Result: No teratogenic effects.

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-:
Species: Rat, female

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Application Route: Oral
General Toxicity Maternal: No-observed-effect level: 50 mg/kg body weight
Method: OECD Test Guideline 414
Result: No teratogenic effects.

3-aminopropyldimethylamine:

Species: Rat, male and female
Application Route: Oral
General Toxicity Maternal: NOAEL (No observed adverse effect level): 200 mg/kg body weight
Method: OECD Test Guideline 421
Result: No effects on fertility and early embryonic development were detected.

Reproductive toxicity - Assessment : No data available

STOT-single exposure**Ingredients:**

3-aminopropyldimethylamine:
Target Organs: Lungs
Assessment: May cause respiratory irritation.

STOT-repeated exposure

No data available

Repeated dose toxicity**Ingredients:**

benzyl alcohol:
Species: Rat, male and female
NOEC: 400 mg/kg, 1072 mg/m³
Application Route: Ingestion
Test atmosphere: dust/mist
Exposure time: 4 Weeks
Number of exposures: 6 h
Method: OECD Test Guideline 412

1,3-Cyclohexanedimethanamine:

Species: Rat, male
NOAEL (No observed adverse effect level): 60 mg/kg/d
Application Route: Ingestion
Exposure time: 1,008 h
Number of exposures: 7 d
Method: Subacute toxicity

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5:
Species: Rat, male and female
No-observed-effect level: 30 mg/kg/d

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Application Route: Ingestion
Exposure time: 672 h
Number of exposures: 7 d
Method: Subacute toxicity

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-:
Species: Rat, male and female
NOEC: 60 mg/kg, 200 mg/m³
Application Route: Ingestion
Test atmosphere: dust/mist
Exposure time: 216 h
Number of exposures: 6 h
Method: Subchronic toxicity

N,N,N',N',N'',N''-hexamethyl-1,3,5-triazine-1,3,5(2H,4H,6H)-tripropanamine:
Species: Rat, male and female
NOAEL (No observed adverse effect level): 240 mg/kg
Application Route: Ingestion
Method: OECD Test Guideline 422

3-aminopropyldimethylamine:
Species: Rat, male and female
NOAEL (No observed adverse effect level): 50 mg/kg/d
Application Route: Ingestion
Exposure time: days 28 d
Number of exposures: 7 days/week
Method: Subacute toxicity

Repeated dose toxicity - : No data available
Assessment

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

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Neurological effects

No data available

Further information**Product:**

Remarks: No data available

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

benzyl alcohol:

Toxicity to fish : LC50: 460 mg/l
Exposure time: 96 h
Test Type: static test
Test substance: Fresh water
Method: OPPTS 850.1075

1,3-Cyclohexanedimethanamine:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 130 mg/l
Exposure time: 96 h
Test Type: semi-static test
Test substance: Fresh water
Method: OECD Test Guideline 203

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 110 mg/l
Exposure time: 96 h
Test Type: semi-static test
Test substance: Fresh water
Method: Directive 67/548/EEC, Annex V, C.1.

Ingredients:

benzyl alcohol:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 230 mg/l
Exposure time: 48 h
Test substance: Fresh water
Method: OECD Test Guideline 202

1,3-Cyclohexanedimethanamine:

Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): 33.1 mg/l
Exposure time: 48 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 202

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-:

Toxicity to daphnia and other aquatic invertebrates : EC50: 23 mg/l
Exposure time: 48 h

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Test Type: static test
 Test substance: Fresh water
 Method: OECD Test Guideline 202

N,N,N',N',N'',N''-hexamethyl-1,3,5-triazine-1,3,5(2H,4H,6H)-tripropanamine:
 Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 62.6 mg/l
 Exposure time: 48 h
 Test Type: static test
 Test substance: Fresh water
 Method: OECD Test Guideline 202

3-aminopropyldimethylamine:
 Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 59.5 mg/l
 Exposure time: 48 h
 Test Type: static test
 Test substance: Fresh water
 Method: Directive 67/548/EEC, Annex V, C.2.

Ingredients:

benzyl alcohol:
 Toxicity to algae : EgC50 (Selenastrum capricornutum (green algae)): 770 mg/l
 Exposure time: 72 h
 Test Type: static test
 Test substance: Fresh water
 Method: OECD Test Guideline 201

1,3-Cyclohexanedimethanamine:
 Toxicity to algae : EbC50 (Selenastrum capricornutum (green algae)): 29.7 mg/l
 Exposure time: 72 h
 Test Type: static test
 Test substance: Fresh water
 Method: OECD Test Guideline 201

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-:
 Toxicity to algae : EC50: 37 mg/l
 Exposure time: 72 h
 Test Type: static test
 Test substance: Fresh water
 Method: Directive 67/548/EEC, Annex V, C.3.

N,N,N',N',N'',N''-hexamethyl-1,3,5-triazine-1,3,5(2H,4H,6H)-tripropanamine:
 Toxicity to algae : ErC50: 77.7 mg/l
 Exposure time: 72 h
 Test Type: static test
 Test substance: Fresh water
 Method: OECD Test Guideline 201

3-aminopropyldimethylamine:
 Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): 34 mg/l
 Exposure time: 72 h
 Test Type: static test
 Test substance: Fresh water
 Method: OECD Test Guideline 201

EC10 (Pseudokirchneriella subcapitata (green algae)): 26 mg/l

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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:

benzyl alcohol:

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 51 mg/l
 Exposure time: 21 d
 Test Type: semi-static test
 Test substance: Fresh water
 Method: OECD Test Guideline 211

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

Ingredients:

1,3-Cyclohexanedimethanamine:

Toxicity to bacteria : EC50 (activated sludge): > 1,000 mg/l
 Exposure time: 3 h
 Test Type: static test
 Test substance: Fresh water
 Method: OECD Test Guideline 209

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-:

Toxicity to bacteria : EC10: 1,120 mg/l
 Exposure time: 18 h
 Method: Measured

: (Pseudomonas putida): 1,120 mg/l
 Exposure time: 18 h
 Test Type: static test
 Test substance: Fresh water

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:

1,3-Cyclohexanedimethanamine:

Acute aquatic toxicity : This product has no known ecotoxicological effects.

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4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5:

Acute aquatic toxicity : Harmful to aquatic life.

N,N,N',N',N'',N''-hexamethyl-1,3,5-triazine-1,3,5(2H,4H,6H)-tripropanamine:

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Ingredients:

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5:

Chronic aquatic toxicity : Harmful 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:**

benzyl alcohol:

Biodegradability : Inoculum: Sewage (STP effluent)
Concentration: 20 mg/l
Result: Readily biodegradable.
Biodegradation: 95 - 97 %
Exposure time: 21 d
Method: OECD Test Guideline 301A

1,3-Cyclohexanedimethanamine:

Biodegradability : Inoculum: activated sludge
Concentration: 10 mg/l
Result: Not readily biodegradable.
Biodegradation: 29 %
Exposure time: 28 d
Method: OECD Test Guideline 301B

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-:

Biodegradability : Inoculum: activated sludge
Concentration: 6.9 mg/l
Result: Not readily biodegradable.
Biodegradation: 8 %
Exposure time: 28 d
Method: Directive 67/548/EEC Annex V, C.4.A.

N,N,N',N',N'',N''-hexamethyl-1,3,5-triazine-1,3,5(2H,4H,6H)-tripropanamine:

Biodegradability : Inoculum: activated sludge
Result: Readily biodegradable.
Biodegradation: 90 - 100 %
Exposure time: 12 d
Method: OECD Test Guideline 301A

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3-aminopropyldimethylamine:
Biodegradability : Inoculum: activated sludge
Result: Readily biodegradable.
Biodegradation: 65 %
Exposure time: 20 d
Method: OECD Test Guideline 301D

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

Ingredients:

3-aminopropyldimethylamine:
Photodegradation : Test Type: Air
Degradation (direct photolysis): 50 %
Method: Calculation method

Impact on Sewage Treatment : No data available

Bioaccumulative potential**Ingredients:**

benzyl alcohol:
Bioaccumulation : Bioconcentration factor (BCF): 1

3-aminopropyldimethylamine:
Bioaccumulation : Species: Fish
Bioconcentration factor (BCF): 3.16

Ingredients:

benzyl alcohol:
Partition coefficient: n-octanol/water : log Pow: 1.1 (20 °C)

1,3-Cyclohexanedimethanamine:
Partition coefficient: n- : log Pow: 0.783 (21.5 °C)

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octanol/water Method: OECD Test Guideline 107

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-:
 Partition coefficient: n- : log Pow: 0.99 (23 °C)
 octanol/water pH: 6.34
 Method: OECD Test Guideline 107

N,N,N',N',N'',N''-hexamethyl-1,3,5-triazine-1,3,5(2H,4H,6H)-tripropanamine:
 Partition coefficient: n- : log Pow: 0.26 (25 °C)
 octanol/water

3-aminopropyldimethylamine:
 Partition coefficient: n- : log Pow: -0.352 (25 °C)
 octanol/water

Mobility in soil

Mobility : No data available

Ingredients:

benzyl alcohol:
 Distribution among : Koc: 5 - 15.
 environmental compartments
 Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-:
 Distribution among : Koc: 928.
 environmental compartments
 N,N,N',N',N'',N''-hexamethyl-1,3,5-triazine-1,3,5(2H,4H,6H)-tripropanamine:
 Distribution among : Koc: 117.
 environmental compartments
 3-aminopropyldimethylamine:
 Distribution among : Koc: 29, log Koc: 1.46. Method: estimated
 environmental compartments
 Koc: 4.409, log Koc: 0.644.
 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

Endocrine disrupting potential : No data available

Adsorbed organic bound halogens (AOX) : No data available

Hazardous to the ozone layer

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82
 Protection of Stratospheric Ozone - CAA Section 602 Class I
 Substances
 Remarks: This product neither contains, nor was
 manufactured with a Class I or Class II ODS as defined by the

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U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information - Product : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful 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 1760
Proper shipping name : Corrosive liquid, n.o.s.
(1,3-CYCLOHEXANEDIMETHANAMINE,)
Class : 8
Packing group : I
Labels : Corrosive
Packing instruction (cargo aircraft) : 854
Packing instruction (passenger aircraft) : 850

IMDG

UN number : UN 1760
Proper shipping name : CORROSIVE LIQUID, N.O.S.
(1,3-CYCLOHEXANEDIMETHANAMINE,)
Class : 8
Packing group : I
Labels : 8
EmS Code : F-A, S-B
Marine pollutant : yes

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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 1760
Proper shipping name	: CORROSIVE LIQUIDS, N.O.S. (1,3-CYCLOHEXANEDIMETHANAMINE,)
Class	: 8
Packing group	: I
Labels	: CORROSIVE
ERG Code	: 154
Marine pollutant	: yes

SECTION 15. REGULATORY INFORMATION

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

EPCRA - Emergency Planning and Community Right-to-Know**CERCLA Reportable Quantity**

Ingredients	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
1-CHLORO-2,3-EPOXYPROPANE	106-89-8	100	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 311/312 Hazards : No SARA Hazards

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.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

California Prop 65

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

1-chloro-2,3-epoxypropane	106-89-8
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WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

1-chloro-2,3-epoxypropane	106-89-8
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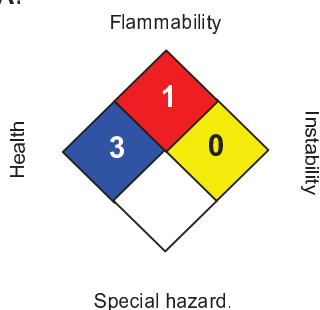
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The ingredients of this product are reported in the following inventories:

TSCA : On TSCA Inventory
 DSL : This product contains the following components listed on the Canadian NDSL. All other components are on the Canadian DSL.
 : Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane and 1,3-cyclohexanedimethanamine

Inventories

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

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

HEALTH	3*
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High

4 = Extreme, * = Chronic

Revision Date : 09/10/2015

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IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PURPOSE. THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

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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