

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

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EPOCAST® 52 A US

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	20.12.2018	400001010250	Date of first issue: 20.12.2018

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : EPOCAST® 52 A US

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture : Epoxy constituents

1.3 Details of the supplier of the safety data sheet

Company : Huntsman Advanced Materials (Europe)BVBA
Address : Everslaan 45
3078 Everberg
Belgium
Telephone : +41 61 299 20 41
Telefax : +41 61 299 20 40

E-mail address of person responsible for the SDS : Global_Product_EHS_AdMat@huntsman.com

1.4 Emergency telephone number

Emergency telephone number : EUROPE: +32 35 75 1234
France ORFILA: +33(0)145425959
ASIA: +65 6336-6011
China: +86 20 39377888
+86 532 83889090
India: + 91 22 42 87 5333
Australia: 1800 786 152
New Zealand: 0800 767 437
USA: +1/800/424.9300

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Germ cell mutagenicity, Category 2	H341: Suspected of causing genetic defects.
Specific target organ toxicity - repeated exposure, Category 2	H373: May cause damage to organs through prolonged or repeated exposure.
Specific target organ toxicity - repeated exposure, Category 2, Gastrointestinal tract, Reproductive organs, Stomach	H373: May cause damage to organs through prolonged or repeated exposure.

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Long-term (chronic) aquatic hazard,
Category 2

H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements : H317 May cause an allergic skin reaction.
H341 Suspected of causing genetic defects.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P260 Do not breathe mist or vapours.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P391 Collect spillage.

Hazardous components which must be listed on the label:

4,4'-Methylenebis[N,N-bis(2,3-epoxypropyl)aniline]

P-(2,3-epoxypropoxy)-N,N-bis(2,3-epoxypropyl)aniline

Additional Labelling:

EUH204 Contains isocyanates. May produce an allergic reaction.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical name	CAS-No. EC-No. Index-No.	Classification	Concentration

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	Registration number		(% w/w)
4,4'-Methylenebis[N,N-bis(2,3-epoxypropyl)aniline]	28768-32-3 249-204-3 01-2119472303-45	Skin Sens. 1B; H317 Aquatic Chronic 2; H411	>= 30 - < 50
P-(2,3-epoxypropoxy)-N,N-bis(2,3-epoxypropyl)aniline	5026-74-4 225-716-2 01-2119954405-36	Acute Tox. 4; H302 Skin Sens. 1; H317 Muta. 2; H341 STOT RE 2; H373 Aquatic Chronic 2; H411	>= 30 - < 50
Formaldehyde, polymer with 2-(chloromethyl)oxirane and 2-methylphenol	29690-82-2 Polymer	Skin Irrit. 2; H315 Eye Irrit. 2; H319	>= 5 - < 10

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Treat symptomatically.
Get medical attention if symptoms occur.
- If inhaled : If inhaled, remove to fresh air.
Get medical attention if symptoms occur.
- In case of skin contact : If on skin, rinse well with water.
- In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Induce vomiting immediately and call a physician.
Keep respiratory tract clear.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products : Carbon monoxide
Carbon dioxide (CO₂)

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

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.

6.3 Methods and material for containment and cleaning up

Methods for 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.

6.4 Reference to other sections

For disposal considerations see section 13., See Section 1 for emergency contact information.,
For personal protection see section 8.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Technical measures : Ensure that eyewash stations and safety showers are close to the workstation location.
- Local/Total ventilation : Ensure adequate ventilation.
- Advice on safe handling : Do not breathe vapours or spray mist.
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 sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Hygiene measures : When using do not eat or drink. When using do not smoke.
Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : 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. Keep in properly labelled containers.
- Advice on common storage : For incompatible materials please refer to Section 10 of this SDS.
- Further information on storage stability : No decomposition if stored and applied as directed.
- Recommended storage temperature : 2 - 8 °C

7.3 Specific end use(s)

- Specific use(s) : No data available
No data available

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
4,4'-Methylenebis[N,N-bis(2,3-epoxypropyl)aniline]	Workers	Dermal	Long-term systemic effects	0.5 mg/kg
	Workers	Oral	Long-term systemic effects	3.5 mg/kg
P-(2,3-epoxypropoxy)-N,N-bis(2,3-epoxypropyl)aniline	Workers	Inhalation	Long-term systemic effects	1.752 mg/cm2
	Workers	Dermal	Long-term systemic effects	0.5 mg/kg

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value	
4,4'-Methylenebis[N,N-bis(2,3-epoxypropyl)aniline]	Fresh water	0.0047 mg/l	
	Remarks:	Assessment Factors	
		Marine water	0.00047 mg/l
		Assessment Factors	
		Freshwater - intermittent	0.047 mg/l
		Assessment Factors	
		Sewage treatment plant	1000 mg/l
		Assessment Factors	
		Fresh water sediment	0.0172 mg/kg
		Equilibrium method	
		Marine sediment	0.00172 mg/kg
		Equilibrium method	
		Soil	0.0115 mg/kg
		Equilibrium method	
P-(2,3-epoxypropoxy)-N,N-bis(2,3-epoxypropyl)aniline	Fresh water	0.0082 mg/l	
		Assessment Factors	
		Marine water	0.00082 mg/l
		Assessment Factors	
	Freshwater - intermittent	0.042 mg/l	

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	Assessment Factors	
	Sewage treatment plant	10 mg/l
	Assessment Factors	
	Fresh water sediment	0.0984 mg/kg
	Equilibrium method	
	Marine sediment	0.00984 mg/kg
	Equilibrium method	

8.2 Exposure controls

Personal protective equipment

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles

Hand protection
Material : butyl-rubber
Break through time : > 8 h

Material : Nitrile rubber
Break through time : 10 - 480 min

Material : Ethyl Vinyl Alcohol Laminate (EVAL)
Break through time : > 8 h

Remarks : The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : blue

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Odour : slight

Odour Threshold : No data is available on the product itself.

pH : No data is available on the product itself.

Melting point/freezing point : No data available

Boiling point : > 200 °C

Flash point : > 100 °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.

Burning rate : No data is available on the product itself.

Upper explosion limit / Upper flammability limit : No data is available on the product itself.

Lower explosion limit / Lower flammability limit : No data is available on the product itself.

Vapour pressure : No data is available on the product itself.

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

Relative density : 1.2

Density : 1.2 g/cm³ (25 °C)

Solubility(ies)
Water solubility : practically insoluble (20 °C)

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.

Auto-ignition temperature : No data is available on the product itself.

Decomposition temperature : > 200 °C

Viscosity
Viscosity, dynamic : ca. 5,000 mPa.s (25 °C)

Explosive properties : No data is available on the product itself.

Oxidizing properties : No data is available on the product itself.

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9.2 Other information

Molecular weight : No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : No hazards to be specially mentioned.

10.4 Conditions to avoid

Conditions to avoid : None known.

10.5 Incompatible materials

Materials to avoid : Strong acids and strong bases
Strong oxidizing agents

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity - Product : Acute toxicity estimate : > 2,000 mg/kg
Method: Calculation method

Components:

4,4'-Methylenebis[N,N-bis(2,3-epoxypropyl)aniline]:

Acute inhalation toxicity : LC50 (Rat, male and female): > 30 mg/m³
Exposure time: 4 h
Test atmosphere: vapour

Formaldehyde, polymer with 2-(chloromethyl)oxirane and 2-methylphenol:

Acute inhalation toxicity : LC50 (Rat, male and female): > 1.7 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity

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Components:

4,4'-Methylenebis[N,N-bis(2,3-epoxypropyl)aniline]:

Acute dermal toxicity : LD50 (Rabbit, male and female): > 3,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

P-(2,3-epoxypropoxy)-N,N-bis(2,3-epoxypropyl)aniline:

Acute dermal toxicity : LD50 (Rat, male and female): > 4,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

Formaldehyde, polymer with 2-(chloromethyl)oxirane and 2-methylphenol:

Acute dermal toxicity : LD50 (Rabbit, male): > 3,000 mg/kg
Method: OECD Test Guideline 402

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

Skin corrosion/irritation

Components:

4,4'-Methylenebis[N,N-bis(2,3-epoxypropyl)aniline]:

Species: Rabbit
Assessment: No skin irritation
Method: OECD Test Guideline 404
Result: No skin irritation

P-(2,3-epoxypropoxy)-N,N-bis(2,3-epoxypropyl)aniline:

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

Formaldehyde, polymer with 2-(chloromethyl)oxirane and 2-methylphenol:

Species: Rabbit
Result: Skin irritation

Serious eye damage/eye irritation

Components:

4,4'-Methylenebis[N,N-bis(2,3-epoxypropyl)aniline]:

Species: Rabbit
Assessment: No eye irritation
Result: No eye irritation

P-(2,3-epoxypropoxy)-N,N-bis(2,3-epoxypropyl)aniline:

Species: Rabbit
Method: Other guidelines
Result: slight irritation

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Formaldehyde, polymer with 2-(chloromethyl)oxirane and 2-methylphenol:

Species: Rabbit

Method: OECD Test Guideline 405

Result: Irritation to eyes, reversing within 7 days

Respiratory or skin sensitisation

Components:

4,4'-Methylenebis[N,N-bis(2,3-epoxypropyl)aniline]:

Exposure routes: Skin

Species: Guinea pig

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

Method: OECD Test Guideline 406

Result: Probability or evidence of low to moderate skin sensitisation rate in humans

P-(2,3-epoxypropoxy)-N,N-bis(2,3-epoxypropyl)aniline:

Exposure routes: Skin

Species: Guinea pig

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

Assessment: No data available

Germ cell mutagenicity

Components:

4,4'-Methylenebis[N,N-bis(2,3-epoxypropyl)aniline]:

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

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

P-(2,3-epoxypropoxy)-N,N-bis(2,3-epoxypropyl)aniline:

Genotoxicity in vitro : 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 480
Result: positive

: Metabolic activation: negative
Method: OECD Test Guideline 471
Result: positive

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

Formaldehyde, polymer with 2-(chloromethyl)oxirane and 2-methylphenol:

Genotoxicity in vitro : Concentration: 100 ug/plate
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Components:

4,4'-Methylenebis[N,N-bis(2,3-epoxypropyl)aniline]:

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

Cell type: Germ
Application Route: Oral
Exposure time: 5 d
Method: OECD Test Guideline 483
Result: negative

Cell type: Germ
Application Route: Oral
Method: OECD Test Guideline 483
Result: negative

P-(2,3-epoxypropoxy)-N,N-bis(2,3-epoxypropyl)aniline:

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Test species: Mouse (male)
Application Route: Oral
Dose: 438, 875, 1750mg/kg bw
Method: OECD Test Guideline 474
Result: negative

Components:

4,4'-Methylenebis[N,N-bis(2,3-epoxypropyl)aniline]:

Germ cell mutagenicity- Assessment : Contains no ingredient listed as a mutagen

P-(2,3-epoxypropoxy)-N,N-bis(2,3-epoxypropyl)aniline:

Germ cell mutagenicity- Assessment : In vitro tests showed mutagenic effects

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Germ cell mutagenicity-
Assessment : No data available

Carcinogenicity

No data available

Components:

4,4'-Methylenebis[N,N-bis(2,3-epoxypropyl)aniline]:
Carcinogenicity - : Contains no ingredient listed as a carcinogen
Assessment

Reproductive toxicity

Effects on fertility : No data available

Components:

4,4'-Methylenebis[N,N-bis(2,3-epoxypropyl)aniline]:
Effects on foetal : Species: Rat, female
development : Application Route: Oral
General Toxicity Maternal: No observed adverse effect level:
90 mg/kg body weight
Method: OECD Test Guideline 414
Result: No teratogenic effects

Components:

4,4'-Methylenebis[N,N-bis(2,3-epoxypropyl)aniline]:
Reproductive toxicity - : Contains no ingredient listed as toxic to reproduction
Assessment

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Repeated dose toxicity

Components:

4,4'-Methylenebis[N,N-bis(2,3-epoxypropyl)aniline]:
Species: Rat, male and female
NOAEL: 50
Application Route: Ingestion
Exposure time: 13 Weeks Number of exposures: 7 d
Method: Subchronic toxicity

P-(2,3-epoxypropoxy)-N,N-bis(2,3-epoxypropyl)aniline:
Species: Rat, male and female

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NOAEL: 50

Application Route: Oral

Exposure time: 28 dNumber of exposures: Once daily

Dose: 0, 50, 150, 450 mg/kg bw/day

Target Organs: Gastrointestinal tract, Stomach, female reproductive organs

Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

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

Neurological effects

No data available

Further information

Ingestion: No data available

SECTION 12: Ecological information

12.1 Toxicity

Components:

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4,4'-Methylenebis[N,N-bis(2,3-epoxypropyl)aniline]:

Toxicity to fish : LC50 (Cyprinus carpio (Carp)): > 6 - < 8 mg/l
Exposure time: 96 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 203
Remarks: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 4.7 mg/l
Exposure time: 48 h
Test Type: semi-static test
Test substance: Fresh water
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Selenastrum capricornutum (green algae)): > 11 mg/l
Exposure time: 72 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 201

Toxicity to microorganisms : IC50 (Pseudomonas putida): > 10,000 mg/l
Exposure time: 24 h
Test Type: static test
Test substance: Fresh water
Method: DIN 38 412 Part 8

Ecotoxicology Assessment

Chronic aquatic toxicity : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

P-(2,3-epoxypropoxy)-N,N-bis(2,3-epoxypropyl)aniline:

Toxicity to fish : LC50 (Cyprinus carpio (Carp)): 4.2 mg/l
Exposure time: 96 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 18 mg/l
Exposure time: 48 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (algae)): 13 mg/l
Exposure time: 72 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.42 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)

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Test Type: semi-static test
Test substance: Fresh water
Method: OECD Test Guideline 211

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

12.2 Persistence and degradability

Components:

4,4'-Methylenebis[N,N-bis(2,3-epoxypropyl)aniline]:

Biodegradability : Inoculum: activated sludge
Result: Not biodegradable
Biodegradation: > 9 - < 10 %
Exposure time: 29 - 30 d
Method: OECD Test Guideline 301B

P-(2,3-epoxypropoxy)-N,N-bis(2,3-epoxypropyl)aniline:

Biodegradability : Inoculum: activated sludge
Concentration: 3.2 mg/l
Result: Not readily biodegradable.
Biodegradation: 3.4 %
Exposure time: 29 d
Method: OECD Test Guideline 301B

Stability in water : Degradation half life (DT50): 4.3 hrs (50 °C)
pH: 7
Method: OECD Test Guideline 111
Remarks: Fresh water

Degradation half life (DT50): 4.1 d (20 °C)
pH: 7
Method: OECD Test Guideline 111

Degradation half life (DT50): 3.9 hrs (50 °C)
pH: 4
Method: OECD Test Guideline 111
Remarks: Fresh water

Degradation half life (DT50): 10 h (40 °C)
pH: 7
Method: OECD Test Guideline 111

Degradation half life (DT50): 2.2 d (25 °C)
pH: 4
Method: OECD Test Guideline 111
GLP: No information available.
Remarks: Fresh water

Degradation half life (DT50): 4.3 h (50 °C)
pH: 7
Method: OECD Test Guideline 111

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Degradation half life (DT50): 2.3 d (25 °C)
pH: 7
Method: OECD Test Guideline 111
Remarks: Fresh water

Degradation half life (DT50): 2.6 d (25 °C)
pH: 9
Method: OECD Test Guideline 111
Remarks: Fresh water

Degradation half life (DT50): 5.7 hrs (50 °C)
pH: 9
Method: OECD Test Guideline 111
Remarks: Fresh water

12.3 Bioaccumulative potential

Components:

4,4'-Methylenebis[N,N-bis(2,3-epoxypropyl)aniline]:
Partition coefficient: n-octanol/water : log Pow: 2.12 (22 °C)
pH: 6.7
Method: OECD Test Guideline 107

P-(2,3-epoxypropoxy)-N,N-bis(2,3-epoxypropyl)aniline:
Partition coefficient: n-octanol/water : log Pow: 0.871 (25 °C)
pH: 7

12.4 Mobility in soil

Components:

4,4'-Methylenebis[N,N-bis(2,3-epoxypropyl)aniline]:
Distribution among environmental compartments : Koc: < 18
Method: OECD Test Guideline 121

P-(2,3-epoxypropoxy)-N,N-bis(2,3-epoxypropyl)aniline:
Distribution among environmental compartments : Koc: 84
Method: OECD Test Guideline 121

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Other adverse effects

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.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Product : 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 as hazardous waste in compliance with local and national regulations.
Dispose of contents/ container to an approved waste disposal plant.
- Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14: Transport information

IATA

- 14.1 UN number : UN 3082
- 14.2 UN proper shipping name : Environmentally hazardous substance, liquid, n.o.s.
(TETRAGLYCIDYL METHYLENEDIANILINE, TRIGLYCIDYL-P-AMINOPHENOL)
- 14.3 Transport hazard class(es) : 9
- 14.4 Packing group : III
- Labels : Miscellaneous
- Packing instruction (cargo aircraft) : 964
- Packing instruction (passenger aircraft) : 964

IMDG

- 14.1 UN number : UN 3082
- 14.2 UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(TETRAGLYCIDYL METHYLENEDIANILINE, TRIGLYCIDYL-P-AMINOPHENOL)
- 14.3 Transport hazard class(es) : 9
- 14.4 Packing group : III
- Labels : 9
- EmS Code : F-A, S-F
- 14.5 Environmental hazards
- Marine pollutant : yes

ADR

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

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14.1 UN number : UN 3082
14.2 UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(TETRAGLYCIDYL METHYLENEDIANILINE, TRIGLYCIDYL-P-AMINOPHENOL)
14.3 Transport hazard class(es) : 9
14.4 Packing group : III
Labels : 9
14.5 Environmental hazards
Environmentally hazardous : yes

RID

14.1 UN number : UN 3082
14.2 UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(TETRAGLYCIDYL METHYLENEDIANILINE, TRIGLYCIDYL-P-AMINOPHENOL)
14.3 Transport hazard class(es) : 9
14.4 Packing group : III
Labels : 9
14.5 Environmental hazards
Environmentally hazardous : no

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).
REACH - List of substances subject to authorisation (Annex XIV) : Not applicable
REACH - List of substances subject to authorisation - Future sunset date : Not applicable

Other regulations:

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

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

DSL : This product contains one or several components listed in the

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Canadian NDSL.

AICS	: On the inventory, or in compliance with the inventory
NZIoC	: Not in compliance with the inventory
ENCS	: On the inventory, or in compliance with the inventory
KECI	: 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
TCSI	: On the inventory, or in compliance with the inventory
TSCA	: On the inventory, or in compliance with the inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), ENCS (Japan), KECI (Korea), NZIOIC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (United States of America (USA))

15.2 Chemical safety assessment

Chemical Safety Assessments for all substances in this product are either Complete or Not applicable.

SECTION 16: Other information

Full text of H-Statements

H302	: Harmful if swallowed.
H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H319	: Causes serious eye irritation.
H341	: Suspected of causing genetic defects.
H373	: May cause damage to organs through prolonged or repeated exposure if swallowed.
H411	: Toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	: Acute toxicity
Aquatic Chronic	: Long-term (chronic) aquatic hazard
Eye Irrit.	: Eye irritation

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Muta.	: Germ cell mutagenicity
Skin Irrit.	: Skin irritation
Skin Sens.	: Skin sensitisation
STOT RE	: Specific target organ toxicity - repeated exposure

Further information

Classification of the mixture:

Skin Sens. 1	H317
Muta. 2	H341
STOT RE 2	H373
STOT RE 2	H373
Aquatic Chronic 2	H411

Classification procedure:

Calculation method
Calculation method
Calculation method
Calculation method
Calculation method

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