

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

Enriching lives through innovation

ARALDITE® 2011 HARDENER

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: - |
| 1.0 | 24.01.2018 | 400001015904 | Date of first issue: 24.01.2018 |

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

1.1 Product identifier

Trade name : ARALDITE® 2011 HARDENER

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

Use of the Substance/Mixture : Hardener

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 corrosion, Sub-category 1C | H314: Causes severe skin burns and eye damage. |
| Serious eye damage, Category 1 | H318: Causes serious eye damage. |
| Skin sensitisation, Category 1 | H317: May cause an allergic skin reaction. |

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

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- Hazard pictograms : 
- Signal word : Danger
- Hazard statements : H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
- Precautionary statements : **Prevention:**
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
- Response:**
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.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
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/doctor.

Hazardous components which must be listed on the label:

N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine

Amines, polyethylenepoly-, triethylenetetramine fraction

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. Registration number | Classification | Concentration (% w/w) |
|--|---|--|--------------------------|
| N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine | 10563-29-8 234-148-4 01-2119970376-29 | Acute Tox. 4; H302 Skin Corr. 1A; H314 Skin Sens. 1B; H317 | >= 5 - < 9.65 |

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|--|---|---|---------------|
| Amines, polyethylenepoly-, triethylenetetramine fraction | 90640-67-8 292-588-2 01-2119487919-13 | Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Chronic 3; H412 | >= 3 - < 5 |
|--|---|---|---------------|

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.
Consult a physician.
Show this 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 : 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.

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

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : No hazardous combustion products are known

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.

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

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

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Advice on safe handling : Do not breathe vapours/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 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. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.
- Storage class (TRGS 510) : 8A, Combustible, corrosive hazardous materials
- Recommended storage temperature : 2 - 40 °C
- Further information on storage stability : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

- Specific use(s) : No data available

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

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|--|-----------|------------|----------------------------|-------------|
| N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine | Workers | Inhalation | Long-term systemic effects | 3.7 mg/m3 |
| | Workers | Inhalation | Acute systemic effects | 7.5 mg/m3 |
| | Workers | Inhalation | Long-term local effects | 3.7 mg/m3 |
| | Workers | Inhalation | Acute local effects | 7.5 mg/m3 |
| | Workers | Dermal | Long-term systemic effects | 0.67 mg/kg |
| | Consumers | Inhalation | Long-term systemic effects | 0.65 mg/m3 |
| | Consumers | Inhalation | Long-term local effects | 0.65 mg/m3 |
| | Consumers | Oral | Long-term systemic effects | 0.2 mg/kg |
| Amines, polyethylenepoly-, triethylenetetramine fraction | Workers | Inhalation | Acute systemic effects | 5380 mg/m3 |
| | Workers | Dermal | Long-term systemic effects | 0.57 mg/kg |
| | Workers | Inhalation | Long-term systemic effects | 1 mg/m3 |
| | Workers | Dermal | Long-term local effects | 0.028 mg/m3 |
| | Consumers | Dermal | Acute systemic effects | 8 mg/kg |
| | Consumers | Inhalation | Acute systemic effects | 1600 mg/m3 |
| | Consumers | Oral | Acute systemic effects | 20 mg/kg |
| | Consumers | Dermal | Acute local effects | 1 mg/cm2 |
| | Consumers | Dermal | Acute local effects | 0.25 mg/kg |
| | Consumers | Inhalation | Long-term systemic effects | 0.29 mg/m3 |
| | Consumers | Oral | Long-term systemic effects | 0.41 mg/kg |
| | Consumers | Dermal | Long-term local effects | 0.43 mg/cm2 |

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

| Substance name | Environmental Compartment | Value |
|--|---------------------------|-----------|
| N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine | Fresh water | 9.2 µg/l |
| Remarks: | Assessment Factors | |
| | Marine water | 0.92 µg/l |
| | Assessment Factors | |
| | Freshwater - intermittent | 92 µg/l |

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| | Assessment Factors | |
| | Sewage treatment plant | 18.1 mg/l |
| | Assessment Factors | |
| | Fresh water sediment | 0.0336 mg/kg |
| | Equilibrium method | |
| | Marine sediment | 0.00336 mg/kg |
| | Equilibrium method | |
| | Soil | 0.00132 mg/kg |
| | Equilibrium method | |
| Amines, polyethylenepoly-, triethylenetetramine fraction | Fresh water | 190 µg/l |
| | Assessment Factors | |
| | Fresh water sediment | 95.9 mg/kg |
| | Equilibrium method | |
| | Marine water | 38 µg/l |
| | Assessment Factors | |
| | Freshwater - intermittent | 200 µg/l |
| | Assessment Factors | |
| | Marine sediment | 19.2 mg/kg |
| | Equilibrium method | |
| | Soil | 19.1 mg/kg |
| | Equilibrium method | |
| | Sewage treatment plant | 4.25 mg/l |
| | Assessment Factors | |
| | Secondary Poisoning | 0.18 mg/kg |
| | Assessment Factors | |

8.2 Exposure controls

Personal protective equipment

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Hand protection

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

Material : Solvent-resistant gloves (butyl-rubber)

Material : Nitrile rubber

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Break through time : 10 - 480 min

Remarks : 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 : Wear respiratory protection when its use is identified for certain contributing scenario.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : light yellow

Odour : slight

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

pH : No data is available on the product itself.

Melting point : No data available

Boiling point : > 200 °C

Flash point : 110 °C
Method: Pensky-Martens 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 : 0.04 hPa (20 °C)

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

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

Density : 0.95 g/cm³ (25 °C)

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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 : 20,000 - 35,000 mPa.s (25 °C)

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

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

9.2 Other information

Molecular weight : No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Not classified as a reactivity hazard.

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 : No data available

10.5 Incompatible materials

Materials to avoid : Strong acids
Strong bases
Strong oxidizing agents

10.6 Hazardous decomposition products

Carbon oxides
Nitrogen oxides (NO_x)
Burning produces noxious and toxic fumes.

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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

Acute inhalation toxicity : No data available

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

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

Skin corrosion/irritation

Product:

Result: Corrosive after 1 to 4 hours of exposure

Serious eye damage/eye irritation

Product:

Species: Rabbit
Assessment: Corrosive
Result: Corrosive

Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

Product:

Remarks: Causes sensitisation.

Assessment: No data available

Germ cell mutagenicity

Components:

N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine:

Genotoxicity in vitro : Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 487
Result: negative

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

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

Amines, polyethylenepoly-, triethylenetetramine fraction:
Genotoxicity in vitro : Concentration: 0 - 200 µg/L
Metabolic activation: negative
Method: OECD Test Guideline 482
Result: negative

Components:

Amines, polyethylenepoly-, triethylenetetramine fraction:
Genotoxicity in vivo : Application Route: Intraperitoneal injection
Dose: 0 - 600 mg/kg
Method: OECD Test Guideline 474
Result: negative

Carcinogenicity

Components:

N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine:
Species: Mouse, male
Application Route: Dermal
Exposure time: 20 month(s)
Frequency of Treatment: 3 daily
Result: negative

Amines, polyethylenepoly-, triethylenetetramine fraction:
Species: Mouse, male
Application Route: Dermal
Dose: 42 mg/kg
Frequency of Treatment: 3 daily
Method: OECD Test Guideline 451
Result: negative

Carcinogenicity - Assessment : No data available

Reproductive toxicity

Components:

N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine:
Effects on fertility : Species: Rat, male and female
Application Route: Oral
Method: OECD Test Guideline 422
Result: Animal testing did not show any effects on fertility.

Components:

N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine:

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Effects on foetal development : Species: Rat, male and female
Application Route: Oral
General Toxicity Maternal: No observed adverse effect level: 15 mg/kg body weight
Developmental Toxicity: No observed adverse effect level: 15 mg/kg body weight
Embryo-foetal toxicity: No observed adverse effect level: 15 mg/kg body weight
Method: OECD Test Guideline 422
Result: No effects on fertility and early embryonic development were detected.

Amines, polyethylenepoly-, triethylenetetramine fraction:
Species: Rat
Application Route: Oral
General Toxicity Maternal: No observed adverse effect level: > 750 mg/kg body weight
Method: OECD Test Guideline 414
Result: No teratogenic effects

Species: Rabbit
Application Route: Dermal
General Toxicity Maternal: No observed adverse effect level: 125 mg/kg body weight
Method: OECD Test Guideline 414
Result: No teratogenic effects

Components:

N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine:
Reproductive toxicity - Assessment : No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Repeated dose toxicity

Components:

N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine:
Species: Rat, male and female
: 550
Application Route: Ingestion
Test atmosphere: vapour
Exposure time: 3 Weeks Number of exposures: 7 d
Method: Subchronic toxicity

Species: Mouse, male
NOAEL: >= 56.3
Application Route: Skin contact

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Exposure time: 20 h Number of exposures: 3 d
Method: Chronic toxicity

Amines, polyethylenepoly-, triethylenetetramine fraction:
Species: Rat, male and female
NOAEL: 50 mg/kg
Application Route: Ingestion
Exposure time: 26 Weeks Number of exposures: 7 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

SECTION 12: Ecological information

12.1 Toxicity

Components:

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N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine:

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): > 100 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)): 9.2 mg/l
Exposure time: 48 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 202

Toxicity to algae : ErC50 (Selenastrum capricornutum (green algae)): 21 mg/l
Exposure time: 72 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 (Pseudomonas putida): 181 mg/l
Exposure time: 16 h
Test Type: static test
Test substance: Fresh water
Method: DIN 38 412 Part 8

Amines, polyethylenepoly-, triethylenetetramine fraction:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 330 mg/l
Exposure time: 96 h
Test Type: static test
Test substance: Fresh water
Method: EPA OTS 797.1400

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 31.1 mg/l
Exposure time: 48 h
Test Type: static test
Test substance: Fresh water
Method: Directive 67/548/EEC, Annex V, C.2.

Toxicity to algae : ErC50 (Selenastrum capricornutum (green algae)): 20 mg/l
Exposure time: 72 h
Test Type: semi-static test
Test substance: Fresh water
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 (activated sludge): 800 mg/l
Exposure time: 0.5 h
Test Type: static test
Test substance: Fresh water

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC10: 1.9 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Test Type: semi-static test
Test substance: Fresh water
Method: OECD Test Guideline 202

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

12.2 Persistence and degradability

Components:

N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 100 %
Exposure time: 28 d
Method: ISO

Amines, polyethylenepoly-, triethylenetetramine fraction:

Biodegradability : Inoculum: activated sludge
Result: Not readily biodegradable.
Biodegradation: 0 %
Exposure time: 162 d
Method: OECD Test Guideline 301D

Inoculum: activated sludge
Result: Not readily biodegradable.
Biodegradation: 20 %
Exposure time: 84 d
Method: OECD Test Guideline 302 A

12.3 Bioaccumulative potential

Components:

N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine:

Partition coefficient: n-
octanol/water : log Pow: 0.5

log Pow: -0.56 (25 °C)
pH: 11.6
Method: OECD Test Guideline 107

Amines, polyethylenepoly-, triethylenetetramine fraction:

Partition coefficient: n-
octanol/water : log Pow: -2.65 (20 °C)
Method: OECD Test Guideline 117

12.4 Mobility in soil

Components:

Amines, polyethylenepoly-, triethylenetetramine fraction:

Distribution among
environmental compartments : Koc: 1584.9 - 5012
Method: OECD Test Guideline 106

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

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very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Other adverse effects

Product:

Additional ecological information : No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Do not dispose of waste into sewer.
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

IATA

14.1 UN number : UN 2735

14.2 UN proper shipping name : Polyamines, liquid, corrosive, n.o.s.
(DIMETHYL DIPROPYL TRIAMINE)

14.3 Transport hazard class(es) : 8

14.4 Packing group : III

Labels : Corrosive

Packing instruction (cargo aircraft) : 856

Packing instruction (passenger aircraft) : 852

IMDG

14.1 UN number : UN 2735

14.2 UN proper shipping name : POLYAMINES, LIQUID, CORROSIVE, N.O.S.
(DIMETHYL DIPROPYL TRIAMINE)

14.3 Transport hazard class(es) : 8

14.4 Packing group : III

Labels : 8

EmS Code : F-A, S-B

14.5 Environmental hazards

Marine pollutant : no

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

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ADR

14.1 UN number : UN 2735
14.2 UN proper shipping name : POLYAMINES, LIQUID, CORROSIVE, N.O.S.
(DIMETHYL DIPROPYL TRIAMINE)
14.3 Transport hazard class(es) : 8
14.4 Packing group : III
Labels : 8
14.5 Environmental hazards
Environmentally hazardous : no

RID

14.1 UN number : UN 2735
14.2 UN proper shipping name : POLYAMINES, LIQUID, CORROSIVE, N.O.S.
(DIMETHYL DIPROPYL TRIAMINE)
14.3 Transport hazard class(es) : 8
14.4 Packing group : III
Labels : 8
14.5 Environmental hazards
Environmentally hazardous : no

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 - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Not applicable

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 (Annex XIV) : Not applicable

Other regulations:

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:

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

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| | | | |
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| | |
|-------|--|
| DSL | : This product contains one or several components listed in the Canadian NDSL. |
| AICS | : On the inventory, or in compliance with the inventory |
| NZIoC | : On the inventory, or in compliance with the inventory |
| ENCS | : On the inventory, or in compliance with the inventory |
| KECI | : Not 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. |
| 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. |
| H412 | : Harmful to aquatic life with long lasting effects. |

Full text of other abbreviations

| | |
|-----------------|----------------------------|
| Acute Tox. | : Acute toxicity |
| Aquatic Chronic | : Chronic aquatic toxicity |
| Eye Dam. | : Serious eye damage |
| Skin Corr. | : Skin corrosion |
| Skin Sens. | : Skin sensitisation |

SAFETY DATA SHEET

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Further information

Classification of the mixture:

| | |
|---------------|------|
| Skin Corr. 1C | H314 |
| Eye Dam. 1 | H318 |
| Skin Sens. 1 | H317 |

Classification procedure:

| |
|-------------------------------------|
| Based on product data or assessment |
| Based on product data or assessment |
| Calculation method |

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