

ARALDITE® 2014-2 HARDENER

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	01.06.2016	400001014968	Date of first issue: 01.06.2016

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

1.1 Product identifier

Trade name : ARALDITE® 2014-2 HARDENER

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

Use of the Substance/Mixture : Adhesives

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 irritation, Category 2	H315: Causes skin irritation.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Chronic aquatic toxicity, Category 2	H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

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Hazard pictograms

:



Signal word

: Danger

Hazard statements

H315	Causes skin irritation.
H318	Causes serious eye damage.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention:
P261 Avoid breathing mist or vapours.
P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection.

Response:
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/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.

Disposal:
P501 Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous components which must be listed on the label:

fatty acids, C18-unsatd., dimers, polymers with oleic acid and triethylenetetramine

2,2,4(OR 2,4,4)-TRIMETHYLHEXANE-1,6-DIAMINE

Dimethyldipropyltriamine

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

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Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration (% w/w)
Fatty acids, C18-unsatd., dimers, polymers with oleic acid and triethylenetetramine	68154-62-1 01-2119972322-40	Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Chronic 2; H411	30 - 60
2,2,4(OR 2,4,4)-TRIMETHYLHEXANE-1,6-DIAMINE	25513-64-8 247-063-2	Acute Tox. 4; H302 Skin Corr. 1A; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317	7 - 13
Fatty acids, C18-unsatd., dimers, polymers with oleic acid and triethylenetetramine	68154-62-1	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Chronic 3; H412	3 - 7
Dimethyldipropyltriamine	10563-29-8 234-148-4	Acute Tox. 4; H302 Skin Corr. 1A; H314 Skin Sens. 1B; H317	3 - 7

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- If inhaled : Move to fresh air.
Keep patient warm and at rest.
If symptoms persist, call a physician.
- In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.
If symptoms persist, call a physician.
- In case of eye contact : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Seek medical advice.
- If swallowed : Rinse mouth with water.
Do NOT induce vomiting.
Consult a physician if necessary.

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

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

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Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Do not use a solid water stream as it may scatter and spread fire.
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.

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

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.
Ensure adequate ventilation.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
Do not allow contact with soil, surface or ground water.

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

None

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.

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Local/Total ventilation	: Ensure adequate ventilation.
Advice on safe handling	: 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.
Advice on protection against fire and explosion	: Normal measures for preventive fire protection.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. When using do not eat, drink or 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 containers tightly closed in a cool, well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Other data	: No decomposition if stored and applied as directed.

7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Not applicable

8.2 Exposure controls

Engineering measures

Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Eye protection	: Safety glasses
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Hand protection	
Material	: butyl-rubber

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

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

Remarks	: The suitability for a specific workplace should be discussed with the producers of the protective gloves. 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).
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Skin and body protection	: Protective suit
Respiratory protection	: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Recommended Filter type: Combined particulates and organic vapour type
Filter type	: Filter type A-P

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: paste
Colour	: black
Odour	: amine-like
Boiling point	: > 200 °C
Flash point	: > 100 °C Method: closed cup
Vapour pressure	: 0.001 hPa
Density	: ca. 1.6 g/cm ³
Solubility(ies)	
Water solubility	: insoluble (20 °C)
Auto-ignition temperature	: > 200 °C
Decomposition temperature	: > 200 °C
Viscosity	
Viscosity, dynamic	: 75 - 150 Pas (20 °C) Method: DIN, Other

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

No decomposition if stored and applied as directed.

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10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under normal conditions.

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

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Components:

fatty acids, C18-unsatd., dimers, polymers with oleic acid and triethylenetetramine:

Acute oral toxicity : LD50 (Rat, female): > 2,000 mg/kg
Method: OECD Test Guideline 423

2,2,4(OR 2,4,4)-TRIMETHYLHEXANE-1,6-DIAMINE:

Acute oral toxicity : LD50 (Rat): 910 mg/kg
Method: OECD Test Guideline 401

Dimethyldipropyltriamine:

Acute oral toxicity : LD50 (Rat, male and female): 1,669 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : No data available

Components:

fatty acids, C18-unsatd., dimers, polymers with oleic acid and triethylenetetramine:

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402

Dimethyldipropyltriamine:

Acute dermal toxicity : LD50 (Rabbit): 1,310 mg/kg

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

Skin corrosion/irritation

Product:

Species: reconstructed human epidermis (RhE)
Method: OECD Test Guideline 435
Result: Non-corrosive
GLP: yes

Serious eye damage/eye irritation

Components:

fatty acids, C18-unsatd., dimers, polymers with oleic acid and triethylenetetramine:
Species: Rabbit
Assessment: Severe eye irritation
Method: OECD Test Guideline 405
Result: Irritating to eyes.

Species: Other
Assessment: May cause eye and skin irritation.
Method: OECD Test Guideline 437
Result: May cause eye and skin irritation.

2,2,4(OR 2,4,4)-TRIMETHYLHEXANE-1,6-DIAMINE:

Species: Rabbit
Method: OECD Test Guideline 405
Result: Corrosive

polyamide resin:
Assessment: Irritating to eyes.

Dimethyldipropyltriamine:
Assessment: Severe eye irritation
Result: Corrosive

Respiratory or skin sensitisation

Components:

fatty acids, C18-unsatd., dimers, polymers with oleic acid and triethylenetetramine:
Exposure routes: Skin
Species: Mouse
Method: OECD Test Guideline 429
Result: Causes sensitisation.

2,2,4(OR 2,4,4)-TRIMETHYLHEXANE-1,6-DIAMINE:

Exposure routes: Skin
Species: Guinea pig
Method: OECD Test Guideline 406
Result: The product is a skin sensitiser, sub-category 1A.

polyamide resin:

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Assessment: May cause sensitisation by skin contact.

Dimethyldipropyltriamine:

Exposure routes: Skin

Species: Guinea pig

Method: OECD Test Guideline 406

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

Assessment: No data available

Germ cell mutagenicity

Components:

fatty acids, C18-unsatd., dimers, polymers with oleic acid and triethylenetetramine:

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

: 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 487
Result: negative

2,2,4(OR 2,4,4)-TRIMETHYLHEXANE-1,6-DIAMINE:

Genotoxicity in vitro : Test Type: Ames test
Test species: Salmonella typhimurium
Concentration: 5000 ug/plate
Metabolic activation: with and without metabolic activation
Method: Directive 67/548/EEC, Annex, B.13/14
Result: negative

: Test Type: Chromosome aberration test in vitro
Test species: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative

: Test Type: In vitro mammalian cell gene mutation test
Test species: Chinese hamster ovary cells
Concentration: 2 mg/ml
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

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Dimethyldipropyltriamine:
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

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

Components:

2,2,4(OR 2,4,4)-TRIMETHYLHEXANE-1,6-DIAMINE:

Genotoxicity in vivo : Test species: Chinese hamster (male and female)
Cell type: Bone marrow
Application Route: Oral
Dose: 825 - 1000 mg/kg
Method: OECD Test Guideline 474
Result: negative

Test Type: In vivo micronucleus test
Test species: Mouse (male and female)
Application Route: Oral
Dose: 850 - 1000 mg/kg
Method: OECD Test Guideline 474
Result: negative

Carcinogenicity

Components:

Dimethyldipropyltriamine:
Species: Mouse, (male)
Application Route: Dermal
Exposure time: 20 month(s)
Frequency of Treatment: 3 daily
Result: negative

Carcinogenicity - : No data available
Assessment

Reproductive toxicity

Components:

fatty acids, C18-unsatd., dimers, polymers with oleic acid and triethylenetetramine:
Effects on fertility : Species: Rat, male and female
Application Route: Oral

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Method: OECD Test Guideline 422

Result: Animal testing did not show any effects on fertility.

2,2,4(OR 2,4,4)-TRIMETHYLHEXANE-1,6-DIAMINE:

Species: Rat, male and female

Application Route: Oral

Dose: 10, 60, 120 mg/kg bw/day

Method: OECD Test Guideline 416

Result: No effects on fertility and early embryonic development were detected.

Dimethyldipropyltriamine:

Species: Rat, male and female

Application Route: Oral

Method: OECD Test Guideline 422

Result: Animal testing did not show any effects on fertility.

Components:

2,2,4(OR 2,4,4)-TRIMETHYLHEXANE-1,6-DIAMINE:

Effects on foetal development

: Species: Rabbit, female

Application Route: Oral

General Toxicity Maternal: No observed adverse effect level: 50,000 ppm

Result: No teratogenic effects

Dimethyldipropyltriamine:

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.

Components:

Dimethyldipropyltriamine:

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

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Repeated dose toxicity

Components:

fatty acids, C18-unsatd., dimers, polymers with oleic acid and triethylenetetramine:

Species: Rat, male and female

NOAEL: 1000 mg/kg

Application Route: Ingestion

Exposure time: 6 WeeksNumber of exposures: 7 d

Method: Subacute toxicity

2,2,4(OR 2,4,4)-TRIMETHYLHEXANE-1,6-DIAMINE:

Species: Rat, male and female

NOAEL: 10

Application Route: Ingestion

Exposure time: 13 WeeksNumber of exposures: Daily

Dose: 10, 60, 180mg/kg bw

Target Organs: Liver

Species: Rat, male and female

LOAEL: 60

Application Route: Ingestion

Exposure time: 13 WeeksNumber of exposures: Daily

Dose: 10, 60, 180mg/kg bw

Target Organs: Liver

Dimethyldipropyltriamine:

Species: Rat, male and female

: 550

Application Route: Ingestion

Test atmosphere: vapour

Exposure time: 3 WeeksNumber of exposures: 7 d

Method: Subchronic toxicity

Species: Mouse, male

NOAEL: >= 56.3

Application Route: Skin contact

Exposure time: 20 hNumber of exposures: 3 d

Method: Chronic 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

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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:

fatty acids, C18-unsatd., dimers, polymers with oleic acid and triethylenetetramine:

Toxicity to fish	: LC50 (Brachydanio rerio (zebrafish)): 7.07 mg/l Exposure time: 96 h Test Type: semi-static test Test substance: Fresh water Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 5.18 mg/l Exposure time: 48 h Test Type: static test Test substance: Fresh water Method: OECD Test Guideline 202
Toxicity to algae	: EC50 (Selenastrum capricornutum (green algae)): 2.43 mg/l Exposure time: 72 h Test Type: static test Test substance: Fresh water Method: OECD Test Guideline 201
Toxicity to bacteria	: EC50 (activated sludge): 421 mg/l Exposure time: 3 h Test Type: static test Test substance: Fresh water Method: OECD Test Guideline 209

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2,2,4(OR 2,4,4)-TRIMETHYLHEXANE-1,6-DIAMINE:

- Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 174 mg/l
Exposure time: 48 h
Method: DIN 38412
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 31.5 mg/l
Exposure time: 24 h
Method: DIN 38412
- Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (algae)): 43.5 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
- EC50 (Pseudokirchneriella subcapitata (algae)): 37.1 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
- NOEC (Pseudokirchneriella subcapitata (algae)): 16 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
- Toxicity to bacteria : IC50 (Pseudomonas putida): 89 mg/l
Exposure time: 17 h
- Toxicity to fish (Chronic toxicity) : NOEC: 10.9 mg/l
Exposure time: 30 d
Species: Brachydanio rerio (zebrafish)
Method: OECD Test Guideline 210
- Lowest Observed Effect Concentration: 10.9 mg/l
Exposure time: 30 d
Species: Brachydanio rerio (zebrafish)
Method: OECD Test Guideline 210
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 1.02 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211
- Lowest Observed Effect Concentration: 1.02 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211
- Toxicity to soil dwelling organisms : NOEC: $\geq 1,000$ mg/kg
Exposure time: 56 d
Species: Eisenia fetida (earthworms)
Method: OECD Test Guideline 222
- EC50: $\geq 1,000$ mg/kg
Exposure time: 56 d
Species: Eisenia fetida (earthworms)
Method: OECD Test Guideline 222

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polyamide resin:

Ecotoxicology Assessment

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Dimethyldipropyltriamine:

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

Ecotoxicology Assessment

Acute aquatic toxicity : Harmful to aquatic life.

12.2 Persistence and degradability

Components:

2,2,4(OR 2,4,4)-TRIMETHYLHEXANE-1,6-DIAMINE:

Biodegradability : Inoculum: activated sludge
Concentration: 11.4 mg/l
Result: Not readily biodegradable.
Biodegradation: 7 %
Exposure time: 28 d

Dimethyldipropyltriamine:

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

12.3 Bioaccumulative potential

Components:

2,2,4(OR 2,4,4)-TRIMETHYLHEXANE-1,6-DIAMINE:

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Partition coefficient: n-octanol/water : log Pow: -0.3 (25 °C)
Method: OECD Test Guideline 117

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

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

12.4 Mobility in soil

No data available

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

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Can be landfilled or incinerated, when in compliance with local regulations.
Where possible recycling is preferred to disposal or incineration.
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 3082

14.2 UN proper shipping name : Environmentally hazardous substance, liquid, n.o.s.
(POLYAMIDE RESIN)

14.3 Transport hazard class(es) : 9

14.4 Packing group : III

Labels : Miscellaneous

Packing instruction (cargo) : 964

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aircraft)
Packing instruction : 964
(passenger aircraft)

IMDG

14.1 UN number : UN 3082
14.2 UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (POLYAMIDE RESIN)
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

14.1 UN number : UN 3082
14.2 UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (POLYAMIDE RESIN)
14.3 Transport hazard class(es) : 9
14.4 Packing group : III
Labels : 9
14.5 Environmental hazards
Marine pollutant : no

RID

14.1 UN number : UN 3082
14.2 UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (POLYAMIDE RESIN)
14.3 Transport hazard class(es) : 9
14.4 Packing group : III
Labels : 9
14.5 Environmental hazards
Marine pollutant : 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 - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : Not applicable

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REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

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

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	: On the inventory, or in compliance with the inventory
ENCS	: Low volume exemption
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

Inventories

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

15.2 Chemical safety assessment

SECTION 16: Other information

Full text of H-Statements

H302	: Harmful if swallowed.
H314	: Causes severe skin burns and eye damage.
H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H318	: Causes serious eye damage.
H319	: Causes serious eye irritation.
H411	: Toxic to aquatic life with long lasting effects.
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
Eye Irrit.	: Eye irritation

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

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Skin Corr.	: Skin corrosion
Skin Irrit.	: Skin irritation
Skin Sens.	: Skin sensitisation

Further information

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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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