

ARALDITE® SUPERSTRENGTH HARDENER

Version	Revision Date:	SDS Number:	Date of last issue: 2016/11/03
1.1	2018/07/25	400001008801	Date of first issue: 2016/11/03

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ARALDITE® SUPERSTRENGTH HARDENER

Manufacturer or supplier's details

Company : Huntsman Advanced Materials (Guangdong) Co., Ltd.
Address : Flying Geese Mountain Industrial Park, Shilou Town, Panyu,
Guangzhou, Guangdong 511447, P.R.C.
Telephone : +86 20 39377000
Telefax : +86 20 84865122
E-mail address : Global_Product_EHS_AdMat@huntsman.com
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

Recommended use of the chemical and restrictions on use

Recommended use : Hardener
Restrictions on use : For industrial use only.



2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	: liquid
Colour	: light yellow
Odour	: slight

Causes severe skin burns and eye damage. May cause an allergic skin reaction. Harmful to aquatic life. Toxic to aquatic life with long lasting effects.

GHS Classification

Skin corrosion/irritation	: Category 1
Serious eye damage/eye irritation	: Category 1
Skin sensitisation	: Category 1
Short-term (acute) aquatic	: Category 3

ARALDITE® SUPERSTRENGTH HARDENER

Version 1.1 Revision Date: 2018/07/25 SDS Number: 400001008801 Date of last issue: 2016/11/03
Date of first issue: 2016/11/03

hazard

Chronic aquatic toxicity : Category 2

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H402 Harmful to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P272 Contaminated work clothing should 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 + 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/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.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.
Storage:
P405 Store locked up.
Disposal:
P501 Dispose of contents/container to an approved facility in accordance with local, regional, national and international regulations.

Physical and chemical hazards

Not classified based on available information.

ARALDITE® SUPERSTRENGTH HARDENER

Version 1.1 Revision Date: 2018/07/25 SDS Number: 400001008801 Date of last issue: 2016/11/03
Date of first issue: 2016/11/03

Health hazards

Causes severe skin burns and eye damage. Causes serious eye damage. May cause an allergic skin reaction.

Environmental hazards

Harmful to aquatic life. Toxic to aquatic life with long lasting effects.

Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	68082-29-1	>= 70 - < 90
N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine	10563-29-8	>= 5 - < 9.65
Triethylenetetramine	112-24-3	>= 2.5 - < 3

4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Consult a physician.
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 : 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.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
Do NOT induce vomiting.
Never give anything by mouth to an unconscious person.

ARALDITE® SUPERSTRENGTH HARDENER

Version	Revision Date:	SDS Number:	Date of last issue: 2016/11/03
1.1	2018/07/25	400001008801	Date of first issue: 2016/11/03

If symptoms persist, call a physician.
Take victim immediately to hospital.

Most important symptoms and effects, both acute and delayed : None known.

Notes to physician : Treat symptomatically.

5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : High volume water jet
- 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
- Specific extinguishing methods : 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 firefighters : In the event of fire, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Refer to protective measures listed in sections 7 and 8.
- 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 : Neutralise with acid.
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling

Advice on protection against : Normal measures for preventive fire protection.

ARALDITE® SUPERSTRENGTH HARDENER

Version	Revision Date:	SDS Number:	Date of last issue: 2016/11/03
1.1	2018/07/25	400001008801	Date of first issue: 2016/11/03

fire and explosion

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.

Avoidance of contact : Strong acids

Strong bases

Strong oxidizing agents

Storage

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.
Keep in properly labelled containers.

Materials to avoid : For incompatible materials please refer to Section 10 of this SDS.

Further information on storage stability : Stable under normal conditions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines

Filter type : Organic vapour type

Eye/face 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

ARALDITE® SUPERSTRENGTH HARDENER

Version	Revision Date:	SDS Number:	Date of last issue: 2016/11/03
1.1	2018/07/25	400001008801	Date of first issue: 2016/11/03

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

Hand protection
Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : light yellow

Odour : slight

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

pH : 12 (20 °C)
Concentration: 500 g/l

Freezing point : No data is available on the product itself.

Melting point : No data is available on the product itself.

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.

Flammability (liquids) : 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 : 0.95 (25 °C)

Density : 0.95 g/cm³ (25 °C)

Solubility(ies)

ARALDITE® SUPERSTRENGTH HARDENER

Version	Revision Date:	SDS Number:	Date of last issue: 2016/11/03
1.1	2018/07/25	400001008801	Date of first issue: 2016/11/03

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

Self-Accelerating decomposition temperature (SADT) : No data is available on the product itself.

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.

Particle size : No data is available on the product itself.

10. STABILITY AND REACTIVITY

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : No hazards to be specially mentioned.

Conditions to avoid : None known.

Incompatible materials : Strong acids
Strong bases
Strong oxidizing agents

Hazardous decomposition products : Nitrogen oxides (NOx)
Burning produces noxious and toxic fumes.
Carbon oxides

11. TOXICOLOGICAL INFORMATION

Exposure routes : No data is available on the product itself.

Acute toxicity

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

ARALDITE® SUPERSTRENGTH HARDENER

Version	Revision Date:	SDS Number:	Date of last issue: 2016/11/03
1.1	2018/07/25	400001008801	Date of first issue: 2016/11/03

Acute inhalation toxicity : No data available

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

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

Skin corrosion/irritation

Components:

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine:

Assessment: Severe skin irritation

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

Species: Rabbit

Assessment: Corrosive

Method: OECD Test Guideline 404

Result: Corrosive

Triethylenetetramine:

Species: Rabbit

Assessment: Causes burns.

Method: OECD Test Guideline 404

Result: Causes burns.

Serious eye damage/eye irritation

Components:

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine:

Assessment: Risk of serious damage to eyes.

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

Result: Corrosive

Assessment: Severe eye irritation

Triethylenetetramine:

Species: Rabbit

Result: Corrosive

Assessment: Corrosive

Method: OECD Test Guideline 405

Respiratory or skin sensitisation

Components:

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

Exposure routes: Skin

Species: Guinea pig

Method: OECD Test Guideline 406

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

Triethylenetetramine:

ARALDITE® SUPERSTRENGTH HARDENER

Version 1.1 Revision Date: 2018/07/25 SDS Number: 400001008801 Date of last issue: 2016/11/03
Date of first issue: 2016/11/03

Exposure routes: Skin
Species: Guinea pig
Method: OECD Test Guideline 406
Result: May cause sensitisation by skin contact.

Exposure routes: Skin
Species: Guinea pig
Method: OECD Test Guideline 406
Result: May cause sensitisation by skin contact.

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

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

Triethylenetetramine:

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

Components:

Triethylenetetramine:

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

Triethylenetetramine:

Species: Mouse, male
Application Route: Dermal
Dose: 42 mg/kg

ARALDITE® SUPERSTRENGTH HARDENER

Version	Revision Date:	SDS Number:	Date of last issue: 2016/11/03
1.1	2018/07/25	400001008801	Date of first issue: 2016/11/03

Frequency of Treatment: 3 days/week
Method: OECD Test Guideline 451
Result: negative

Species: Mouse, male
Application Route: Dermal
Exposure time: 104 weeks
Dose: 16.8 mg/kg
Frequency of Treatment: 3 days/week
Method: OECD Test Guideline 451

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:
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.

Triethylenetetramine:

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:

ARALDITE® SUPERSTRENGTH HARDENER

Version	Revision Date:	SDS Number:	Date of last issue: 2016/11/03
1.1	2018/07/25	400001008801	Date of first issue: 2016/11/03

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

NOEC: 550 ppm

Application Route: Ingestion

Test atmosphere: vapour

Exposure time: 3 Weeks

Number of exposures: 7 d

Method: Subchronic toxicity

Species: Mouse, male

NOAEL: \geq 56.3 mg/kg/d

Application Route: Skin contact

Exposure time: 20 h

Number of exposures: 3 d

Method: Chronic toxicity

Triethylenetetramine:

Species: Rat, male and female

NOAEL: 50 mg/kg/d

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

ARALDITE® SUPERSTRENGTH HARDENER

Version	Revision Date:	SDS Number:	Date of last issue: 2016/11/03
1.1	2018/07/25	400001008801	Date of first issue: 2016/11/03

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1 - 10 ml/l
Exposure time: 96 h

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

Triethylenetetramine:

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

Components:

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

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

Triethylenetetramine:

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 31.1 mg/l

ARALDITE® SUPERSTRENGTH HARDENER

Version	Revision Date:	SDS Number:	Date of last issue: 2016/11/03
1.1	2018/07/25	400001008801	Date of first issue: 2016/11/03

aquatic invertebrates Exposure time: 48 h
Test Type: static test
Test substance: Fresh water
Method: Directive 67/548/EEC, Annex V, C.2.

Components:

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

Triethylenetetramine:
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

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

Toxicity to fish (Chronic toxicity) : No data available

Components:

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

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

Components:

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

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

Toxicity to soil dwelling organisms : No data available

ARALDITE® SUPERSTRENGTH HARDENER

Version	Revision Date:	SDS Number:	Date of last issue: 2016/11/03
1.1	2018/07/25	400001008801	Date of first issue: 2016/11/03

Plant toxicity : No data available

Sediment toxicity : No data available

Toxicity to terrestrial organisms : No data available

Ecotoxicology Assessment
Acute aquatic toxicity : No data available

Components:

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine:

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

Toxicity Data on Soil : No data available

Other organisms relevant to the environment : No data available

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 Method, other

Triethylenetetramine:

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: Inherent Biodegradability: Modified SCAS Test

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

ARALDITE® SUPERSTRENGTH HARDENER

Version	Revision Date:	SDS Number:	Date of last issue: 2016/11/03
1.1	2018/07/25	400001008801	Date of first issue: 2016/11/03

Dissolved organic carbon (DOC) : No data available

Physico-chemical removability : No data available

Stability in water : No data available

Photodegradation : No data available

Impact on Sewage Treatment : No data available

Bioaccumulative potential

Bioaccumulation : No data available

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

Triethylenetetramine:

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

Mobility in soil

Mobility : No data available

Components:

Triethylenetetramine:

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

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

ARALDITE® SUPERSTRENGTH HARDENER

Version	Revision Date:	SDS Number:	Date of last issue: 2016/11/03
1.1	2018/07/25	400001008801	Date of first issue: 2016/11/03

Hazardous to the ozone layer

Ozone-Depletion Potential Not applicable

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

Global warming potential (GWP) : No data available

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.
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.

14. TRANSPORT INFORMATION

International Regulations

IATA

UN/ID No. : UN 2735
Proper shipping name : Amines, liquid, corrosive, n.o.s.
(DIMETHYL DIPROPYL TRIAMINE, TRIETHYLENE TETRAMINE)
Class : 8
Packing group : II
Labels : Corrosive
Packing instruction (cargo aircraft) : 855
Packing instruction (passenger aircraft) : 851

IMDG

UN number : UN 2735
Proper shipping name : AMINES, LIQUID, CORROSIVE, N.O.S.
(DIMETHYL DIPROPYL TRIAMINE, TRIETHYLENE

ARALDITE® SUPERSTRENGTH HARDENER

Version	Revision Date:	SDS Number:	Date of last issue: 2016/11/03
1.1	2018/07/25	400001008801	Date of first issue: 2016/11/03

TETRAMINE)
Class : 8
Packing group : II
Labels : 8
EmS Code : F-A, S-B
Marine pollutant : yes

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

Not applicable for product as supplied.

National Regulations

GB 6944/12268

UN number : UN 2735
Proper shipping name : AMINES, LIQUID, CORROSIVE, N.O.S.
(DIMETHYL DIPROPYL TRIAMINE, TRIETHYLENE
TETRAMINE)
Class : 8
Packing group : II
Labels : 8

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. REGULATORY INFORMATION

National regulatory information

China Occupational Disease Prevention Law

Occupational hazard factor classification category : Not listed

Occupational disease list : Not listed

Regulations on Safety Management of Hazardous Chemicals

Hazardous chemicals list : Not listed

Identification of major hazard installations for dangerous chemicals : Not listed

Key supervision chemical substances : Not listed

Labor Protection Regulations

High toxic substances catalog : Not listed

Environmental management regulations for first import of chemicals and import & export of toxic chemicals

Strictly controlled toxic chemicals for import/export : Not listed

ARALDITE® SUPERSTRENGTH HARDENER

Version	Revision Date:	SDS Number:	Date of last issue: 2016/11/03
1.1	2018/07/25	400001008801	Date of first issue: 2016/11/03

Environmental Administration of New Chemical Substances

Inventory of existing chemicals in China : On the inventory, or in compliance with the inventory

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

CH INV : The formulation contains substances listed on the Swiss Inventory
DSL : All components of this product are on the Canadian DSL
AICS : On the inventory, or in compliance with the inventory
NZIoC : Not in compliance with the inventory
ENCS : On the inventory, or in compliance with the inventory
KECI : On the inventory, or in compliance with the inventory
PICCS : On the inventory, or in compliance with the inventory
IECSC : On the inventory, or in compliance with the inventory
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), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

16. OTHER INFORMATION

Date format : yyyy/mm/dd

The information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A WARRANTY, EXPRESS OR OTHERWISE.

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.

ARALDITE® SUPERSTRENGTH HARDENER

Version	Revision Date:	SDS Number:	Date of last issue: 2016/11/03
1.1	2018/07/25	400001008801	Date of first issue: 2016/11/03

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.

The trademarks above are the property of Huntsman Corporation or an affiliate thereof.

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED HUNTSMAN EMPLOYEE IS AUTHORIZED TO PROVIDE OR MAKE AVAILABLE DATA SHEETS FOR HUNTSMAN PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE.

