G.T.H INDUSTRIES I

SAFETY DATA SHEET

BASE **Patch No More**

REVISION DATE Jan 01 2024

SDS Number: 400001012530

SECTION 1. IDENTIFICATION

Product name

: ARALDITE® GY 506 US

Manufacturer or supplier's details

Company name of supplier

: Huntsman Advanced Materials Americas LLC

Address

P.O. Box 4980 The Woodlands. TX 77387

Telephone

United States of America

Non-Emergency: (800) 257-5547

E-mail address of person responsible for the SDS

: MSDS@huntsman.com

Emergency telephone number : Chemtrec: (800) 424-9300 or (703) 527-3887

Recommended use of the chemical and restrictions on use

Recommended use

: Epoxy constituents

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids

: Category 4

Skin imitation

Category 2

Eye imitation

Category 2A

Skin sensitisation

Category 1

Germ cell mutagenicity

Category 2

Carcinogenicity

Category 2

Acute aquatic toxicity

Category 2

Chronic aquatic toxicity

Category 2

GHS label elements

Hazard pictograms



Signal word

: Warning

Hazard statements

: H227 Combustible liquid. H315 Causes skin imitation.

H317. May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H341 Suspected of causing genetic defects.

H351 Suspected of causing cancer.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

: Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

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:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P337 + P313 If eye imitation persists: Get medical advice/

P362 Take off contaminated clothing and wash before reuse. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

P391 Collect spillage.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

Disposal:

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

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

: Mixture

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)	
Bisphenol A epoxy resin	25068-38-6	60 - 100	
ityl 2,3-epoxypropyl ether	2426-08-6	. 7 - 13	

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4. FIRST AID MEASURES

General advice

: Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

If inhaled

: Move to fresh air.

Keep patient warm and at rest. If symptoms persist, call a physician.

If unconscious place in recovery position and seek medical

advice.

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.

If skin irritation persists, call a physician.

If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact

Immediately flush eye(s) with plenty of water.

Remove contact lenses. Seek medical advice.

Immediately flush eye(s) with plenty of water.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed

: Rinse mouth with water.

Do NOT induce vomiting.

Consult a physician if necessary.

Induce vomiting immediately and call a physician.

Keep respiratory tract clear.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

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

Most important symptoms and effects, both acute and

delayed

: None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media

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

No data is available on the product itself.

Carbon dioxide (CO2)

Unsuitable extinguishing media

: None known.

High volume water jet

No data is available on the product itself.

Specific hazards during firefighting

: Do not use a solid water stream as it may scatter and spread

Do not allow run-off from fire fighting to enter drains or water

courses.

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.

No data is available on the product itself.

Specific extinguishing methods

: No data is available on the product itself.

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.

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. For safety reasons in case of fire, cans should be stored

separately in closed containments.

Use a water spray to cool fully closed containers.

for firefighters

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

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: Use personal protective equipment. Ensure adequate ventilation. Use personal protective equipment.

Environmental precautions

: Prevent product from entering drains.

Do not allow contact with soil, surface or ground water.

Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

Contain spillage, and then collect with non-combustible absorbent material; (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to

local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Technical measures

: Ensure that eyewash stations and safety showers are close to

the workstation location.

Local/Total ventilation

: Ensure adequate ventilation.

Advice on protection against fire and explosion

: Normal measures for preventive fire protection.

Do not spray on a naked flame or any incandescent material. Keep away from open flames, hot surfaces and sources of

ignition.

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.

Avoid formation of aerosol. 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.

Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national

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

Conditions for safe storage

: Keep containers tightly closed in a cool, well-ventilated place.

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

No smoking.

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept

upright to prevent leakage. Observe label precautions.

Electrical installations / working materials must comply with the

technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
butyl 2,3-epoxypropyl ether	2426-08-6	TWA	3 ppm	ACGIH
	•	TWA	50 ppm 270 mg/m3	OSHA Z-1
		TWA	25 ppm 135 mg/m3	OSHA P0

Engineering measures

: Maintain air concentrations below occupational exposure

standards.

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

: Combined particulates and organic vapour type

Respiratory protection

: No personal respiratory protective equipment normally

required.

Respiratory protection

: In the case of vapour formation use a respirator with an

approved filter.

Hand protection

Material

butyl-rubber

Ethyl Vinyl Alcohol Laminate (EVAL)

Break through time

: >8h

Nitrile rubber 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

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contact).

The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection

: Safety glasses

Eye wash bottle with pure water Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal processing

problems.

Skin and body protection

: Protective suit

Impervious clothing

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

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.

When using do not eat or drink. When using do not smoke.

Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

: liquid

Colour

: clear

Odour

: No data is available on the product itself.

Odour Threshold

: No data is available on the product itself.

pH

: No data is available on the product itself.

Flash point

: 78.33 °CMethod: 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

: No data is available on the product itself.

Lower explosion 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

: 1.13 (25 °C)

Density

: No data is available on the product itself.

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Solubility(ies)

Water solubility

: insoluble

Solubility in other solvents

: No data is available on the product itself.

Partition coefficient: n-

octanol/water

Auto-ignition temperature

: No data is available on the product itself.

: No data is available on the product itself.

Thermal decomposition

: No data is available on the product itself.

Self-Accelerating

decomposition temperature

(SADT)

: No data is available on the product itself.

Viscosity

: No data is available on the product itself.

SECTION 10. STABILITY AND REACTIVITY

Reactivity

: Stable under recommended storage conditions.

No decomposition if stored and applied as directed. No decomposition if stored and applied as directed.

Chemical stability

No decomposition if stored and applied as directed.

Stable under normal conditions.

Possibility of hazardous

reactions

No decomposition if stored and applied as directed.

Vapours may form explosive mixture with air.

Conditions to avoid

: None known.

Heat, flames and sparks.

Incompatible materials

: Strong acids and strong bases

Strong oxidizing agents

SECTION 11. TOXICOLOGICAL INFORMATION

exposure

Information on likely routes of : No data is available on the product itself.

Acute toxicity

Acute oral toxicity - Product

Acute toxicity estimate : > 5,000 mg/kg

Method: Calculation method

Acute inhalation toxicity -

Product

Acute toxicity estimate: 13.04 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

Components:

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Bisphenol A epoxy resin:

Acute dermal toxicity

: LD50 (Rat, male and female): > 2,000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Acute toxicity (other routes of : No data available

administration)

Skin corrosion/irritation

Product:

Remarks: May cause skin irritation and/or dermatitis.

Serious eye damage/eye irritation

Product:

Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

Product:

Remarks: Causes sensitisation.

Assessment:

No data available

Germ cell mutagenicity

Components:

Bisphenol A epoxy resin:

Genotoxicity in vitro

: Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: positive

Concentration: 0 - 5000 ug/plate

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: positive

Components:

Bisphenol A epoxy resin:

Genotoxicity in vivo

: Cell type: Germ

Application Route: Oral

Method: OECD Test Guideline 478

Result: negative

Cell type: Somatic Application Route: Oral Dose: 0 - 5000 mg/kg Method: OPPTS 870.5395

Result: negative

Components:

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Bisphenol A epoxy resin: Germ cell mutagenicity-

Assessment

: Weight of evidence does not support classification as a germ cell mutagen.

butyl 2,3-epoxypropyl ether:

Germ cell mutagenicity-

Assessment

: In vitro tests showed mutagenic effects

Germ cell mutagenicity-

Assessment

: No data available

Carcinogenicity

Components:

Bisphenol A epoxy resin:

Species: Rat, (male and female)

Application Route: Oral Exposure time: 24 month(s)

Dose: 15 mg/kg

Frequency of Treatment: 7 days/week Method: OECD Test Guideline 453

Result: negative

Species: Mouse, (male) Application Route: Dermal Exposure time: 24 month(s)

Dose: 0.1 mg/kg

Frequency of Treatment: 3 days/week Method: OECD Test Guideline 453

Result: negative

Species: Rat, (female) Application Route: Dermal Exposure time: 24 month(s)

Dose: 1 mg/kg

Frequency of Treatment: 5 days/week Method: OECD Test Guideline 453

Result: negative

Components:

butyl 2,3-epoxypropyl ether:

Carcinogenicity -Assessment

: Suspected human carcinogens

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

OSHA

IARC

No component of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by OSHA.

NTD

No component of this mending connect at the rate

Reproductive toxicity

Components:

Bisphenol A epoxy resin: Effects on fertility

: Test Type: Two-generation study Species: Rat, male and female Application Route: Oral

Dose: >750 milligram per kilogram

General Toxicity - Parent: No-observed-effect level: 540

mg/kg body weight

General Toxicity F1: No-observed-effect level: 540 mg/kg

body weight

Symptoms: No adverse effects Method: OECD Test Guideline 416

Result: No effects on fertility and early embryonic

development were detected.

Components:

Bisphenol A epoxy resin: Effects on foetal development

: Species:'Rabbit, female Application Route: Dermal

General Toxicity Maternal: No observed adverse effect level:

30 mg/kg body weight Method: Other guidelines Result: No teratogenic effects

Species: Rabbit, female Application Route: Oral

General Toxicity Maternal: No observed adverse effect level:

60 mg/kg body weight

Method: OECD Test Guideline 414 Result: No teratogenic effects

Species: Rat, female Application Route: Oral

General Toxicity Maternal: No observed adverse effect level:

180 mg/kg body weight Method: OECD Test Guideline 414 Result: No teratogenic effects

Reproductive toxicity -Assessment

: No data available

STOT - single exposure

Components:

butyl 2,3-epoxypropyl ether: Exposure routes: Inhalation Target Organs: Respiratory Tract

Assessment: May cause respiratory imitation.

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STOT - repeated exposure

No data available

Repeated dose toxicity

Components:

Bisphenol A epoxy resin: Species: Rat, male and female NOAEL: 50 mg/kg

Application Route: Ingestion Exposure time: 14 Weeks Number of exposures: 7 d Method: Subchronic toxicity

Species: Rat, male and female

NOEL: 10 mg/kg

Application Route: Skin contact Exposure time: 13 Weeks Number of exposures: 5 d Method: Subchronic toxicity

Species: Mouse, male NOAEL: 100 mg/kg

Application Route: Skin contact Exposure time: 13 Weeks Number of exposures: 3 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

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Neurological effects

No data available

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Bisphenol A epoxy resin:

Toxicity to fish

: LC50 (Oncorhynchus mykiss (rainbow trout)): 1.5 mg/l

Exposure time: 96 h
Test Type: static test

Test substance: Fresh water

Method: OECD Test Guideline 203

Components:

Bisphenol A epoxy resin:

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 2.7 mg/l

Exposure time: 48 h
Test Type: static test

Test substance: Fresh water

Components:

Bisphenol A epoxy resin:

Toxicity to algae

: EC50 (Selenastrum capricornutum (green algae)): 9.4 mg/l

Exposure time: 72 h Test Type: static test Test substance: Fresh water Method: EPA-660/3-75-009

M-Factor (Acute aquatic

toxicity)

: No data available

Toxicity to fish (Chronic

toxicity)

: No data available

Components:

Bisphenol A epoxy resin:

Toxicity to daphnia and other

aquatic invertebrates (Chronic toxicity)

: NOEC (Daphnia magna (Water flea)): 0.3 mg/l

Exposure time: 21 d
Test Type: semi-static test

Test substance: Fresh water Method: OECD Test Guideline 211

M-Factor (Chronic aquatic

toxicity)

: No data available

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Components:

Bisphenol A epoxy resin:

Toxicity to bacteria

: IC50 (activated sludge): > 100 mg/l

Exposure time: 3 h
Test Type: static test

Test substance: Fresh water

Toxicity to soil dwelling

organisms

: No data available

Plant toxicity

: No data available

Sediment toxicity

: No data available

Toxicity to terrestrial

organisms

: No data available

Ecotoxicology Assessment

Acute aquatic toxicity

: No data available

Components:

butyl 2,3-epoxypropyl ether:

Chronic aquatic toxicity

: Harmful to aquatic life with long lasting effects.

Toxicity Data on Soil

: No data available

Other organisms relevant to

the environment

: No data available

Further information: No data available

Persistence and degradability

Components:

Bisphenol A epoxy resin:

Biodegradability

: Inoculum: Sewage (STP effluent)

Concentration: 20 mg/l

Result: Not readily biodegradable.

Biodegradation: 5 % Exposure time: 28 d

Method: OECD Test Guideline 301F

Biochemical Oxygen

Demand (BOD)

: No data available

Chemical Oxygen Demand

(COD)

: No data available

BOD/COD

: No data available

ThOD

: No data available

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BOD/ThOD

: No data available

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

Components:

Bisphenol A epoxy resin:

Bioaccumulation

: Bioconcentration factor (BCF): 31 Remarks: Does not bioaccumulate.

Components:

Bisphenol A epoxy resin:

Partition coefficient: n-

octanol/water

: log Pow: 3.242 (25 °C)

pH: 7.1

Method: OECD Test Guideline 117

Mobility in soil

Mobility

: No data available

Components:

Bisphenol A epoxy resin:

Distribution among

environmental compartments

Stability in soil

: Koc: 445

: No data available

Other adverse effects

Environmental fate and

pathways

: No data available

Results of PBT and vPvB

assessment

: No data available

Endocrine disrupting

potential

: No data available

Adsorbed organic bound

halogens (AOX)

: No data available

Hazardous to the ozone layer

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Ozone-Depletion Potential

Regulation: 40 CFR Protection of Environment; Part 82
 Protection of Stratospheric Ozone - CAA Section 602 Class I

Substances

Remarks: This product neither contains, nor was

manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A +

B).

Additional ecological information - Product : An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Toxic to aquatic life with long lasting effects.

Global warming potential

(GWP)

: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues

: 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.

The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

Send to a licensed waste management company.

Contaminated packaging

: Empty remaining contents.

Dispose of as unused product. Do not re-use empty containers.

Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

International Regulation

IATA

UN/ID No.

: UN 3082

Proper shipping name

: Environmentally hazardous substance, liquid, n.o.s.

(BISPHENOL A EPOXY RESIN)

Class

: 9

Packing group

: 111

Labels

Miscellaneous

California Prop. 65

This product does not contain any chemicals known to State

of California to cause cancer, birth defects, or any other

reproductive harm.

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

CH INV

: The formulation contains substances listed on the Swiss

Inventory, On the inventory, or in compliance with the

inventory

TSCA
DSL
AICS
NZIoC
ENCS
KECI

On the inventory, or in compliance with the inventory
All components of this product are on the Canadian DSL

On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory

On the inventory, or in compliance with the inventory
On the inventory, or in compliance with the inventory
On the inventory, or in compliance with the inventory

Inventories

PICCS

IECSC

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

TSCA - 5(a) Significant New Use Rule List of Chemicals No substances are subject to a Significant New Use Rule.

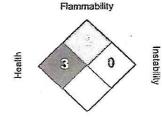
US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Further information

NFPA:



Special hazard.

HMIS III:

HEALTH	3*
HAMMAINITY TO	2
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High

4 = Extreme. * = Chronic

Revision Date

: 05/25/2016

SDS Number: **บ5/25/2016** 400001012530 Packing instruction (cargo : 964 aircraft) Packing instruction : 964 (passenger aircraft) IMDG **UN** number : UN 3082 Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL A EPOXY RESIN) Class 9 Packing group m Labels 9 EmS Code F-A, S-F 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

DOT Classification

UNIDINA number

: UN 3082

Proper shipping name

: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(BISPHENOL A EPOXY RESIN)

Class Packing group

: 111

Labels CLASS 9

ERG Code : 171

Marine pollutant : yes(BISPHENOL A EPOXY RESIN)

GTH Industries Ltd.

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