# **Epoxy Cast 375 gm Part A**

# **Barnes Products P/L**

Chemwatch: 5247-12 Version No: 2.1.1.1

Safety Data Sheet according to WHS and ADG requirements

Chemwatch Hazard Alert Code: 2

Issue Date: 10/03/2017 Print Date: 05/02/2018 S.GHS.AUS.EN

# SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

# **Product Identifier**

Product name	Epoxy Cast 375 gm Part A	
Synonyms	Epoxycast 30kg Part A., Epoxycast 7.5kg Part A., Epoxycast 1.5kg Part A., Epoxycast Starter Kit Part A., Epoxy Cast 375 gm Part A., Product Codes: EC-L, EG-M	
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains bisphenol A/ diglycidyl ether resin, liquid)	
Other means of identification	Not Available	

# Relevant identified uses of the substance or mixture and uses advised against coating systems.

Relevant identified uses	Resin for

# Details of the supplier of the safety data sheet

Registered company name	Barnes Products P/L
Address	5 Greenhills Avenue Moorebank NSW 2170 Australia
Telephone	+61 2 9793 7555
Fax	+61 2 9793 7091
Website	http://www.barnes.com.au/
Email	sales@barnes.com.au

# **Emergency telephone number**

Association / Organisation	Barnes Products Pty Ltd	
Emergency telephone numbers	+61 2 9793 7555 Business Hours	
Other emergency telephone numbers	Poisons Information Centre 13 1126 after hours	

# **SECTION 2 HAZARDS IDENTIFICATION**

# Classification of the substance or mixture

Poisons Schedule	S5
Classification <sup>[1]</sup>	Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Skin Sensitizer Category 1, Acute Aquatic Hazard Category 2, Chronic Aquatic Hazard Category 2
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

# Label elements

Hazard pictogram(s)





SIGNAL WORD   WARNIN	SIGNAL WORD	WARNIN
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# Hazard statement(s)

H315	Causes skin irritation.	
H319	Causes serious eye irritation.	
H317	May cause an allergic skin reaction.	
H411	Toxic to aquatic life with long lasting effects.	

# Precautionary statement(s) Prevention

P280	Wear protective gloves/protective clothing/eye protection/face protection.	
P261	Avoid breathing mist/vapours/spray.	
P273	Avoid release to the environment.	
P272	Contaminated work clothing should not be allowed out of the workplace.	

# Precautionary statement(s) Response

P362	Take off contaminated clothing and wash before reuse.	
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.	
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.	

# Precautionary statement(s) Storage

Not Applicable

# Precautionary statement(s) Disposal

P501

Dispose of contents/container in accordance with local regulations.

# **SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**

#### **Substances**

See section below for composition of Mixtures

#### **Mixtures**

CAS No	%[weight]	Name
25068-38-6	>60	bisphenol A/ diglycidyl ether resin, liquid
9003-36-5	10-<30	bisphenol F/ epichlorohydrin copolymer
68609-97-2	10-<30	(C12-14)alkylglycidyl ether

# **SECTION 4 FIRST AID MEASURES**

# Description of first aid measures

Eye Contact	If this product comes in contact with the eyes:  • Wash out immediately with fresh running water.  • Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.  • Seek medical attention without delay; if pain persists or recurs seek medical attention.  • Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs:  Immediately remove all contaminated clothing, including footwear.  Flush skin and hair with running water (and soap if available).  Seek medical attention in event of irritation.
Inhalation	<ul> <li>If fumes, aerosols or combustion products are inhaled remove from contaminated area.</li> <li>Other measures are usually unnecessary.</li> </ul>
Ingestion	<ul> <li>If swallowed do NOT induce vomiting.</li> <li>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> <li>Observe the patient carefully.</li> <li>Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</li> <li>Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</li> <li>Seek medical advice.</li> </ul>

# Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

# **SECTION 5 FIREFIGHTING MEASURES**

# **Extinguishing media**

- ▶ Foam.
- Dry chemical powder.
- ▶ BCF (where regulations permit).
- ▶ Carbon dioxide.

Do not use a water jet to fight fire.

# Special hazards arising from the substrate or mixture

Fire Incompatibility

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition
may result

# Advice for firefighters

Fire Fighting  • Alert Fire Brigade and tell them location and nature of hazard.  • Wear full body protective clothing with breathing apparatus.  • Prevent, by any means available, spillage from entering drains or water course.  • Use water delivered as a fine spray to control fire and cool adjacent area.	
Fire/Explosion Hazard	<ul> <li>Combustible.</li> <li>Slight fire hazard when exposed to heat or flame.</li> <li>Heating may cause expansion or decomposition leading to violent rupture of containers.</li> <li>On combustion, may emit toxic fumes of carbon monoxide (CO).</li> <li>Combustion products include:         <ul> <li>carbon dioxide (CO2)</li> <li>aldehydes</li> <li>other pyrolysis products typical of burning organic material.</li> </ul> </li> </ul>
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# **SECTION 6 ACCIDENTAL RELEASE MEASURES**

# Personal precautions, protective equipment and emergency procedures

See section 8

# **Environmental precautions**

See section 12

# Methods and material for containment and cleaning up

Minor Spills	<ul> <li>In the event of a spill of a reactive diluent, the focus is on containing the spill to prevent contamination of soil and surface or ground water.</li> <li>If irritating vapors are present, an approved air-purifying respirator with organic vapor canister is recommended for cleaning up spills and leaks.</li> <li>For small spills, reactive diluents should be absorbed with sand.</li> <li>Environmental hazard - contain spillage.</li> <li>Clean up all spills immediately.</li> <li>Avoid breathing vapours and contact with skin and eyes.</li> <li>Control personal contact with the substance, by using protective equipment.</li> <li>Contain and absorb spill with sand, earth, inert material or vermiculite.</li> </ul>
Major Spills	Environmental hazard - contain spillage. Industrial spills or releases of reactive diluents are infrequent and generally contained. If a large spill does occur, the material should be captured, collected, and reprocessed or disposed of according to applicable governmental requirements.  An approved air-purifying respirator with organic-vapor canister is recommended for emergency work.  Moderate hazard.  Clear area of personnel and move upwind.  Alert Fire Brigade and tell them location and nature of hazard.  Wear breathing apparatus plus protective gloves.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

# **SECTION 7 HANDLING AND STORAGE**

#### Precautions for safe handling

	<ul> <li>▶ DO NOT allow clothing wet with material to stay in contact with skin</li> <li>▶ Avoid all personal contact, including inhalation.</li> </ul>
Safe handling	<ul> <li>Wear protective clothing when risk of exposure occurs.</li> </ul>
·	▶ Use in a well-ventilated area.
	▶ Prevent concentration in hollows and sumps.
	► Store in original containers.
Other information	▶ Keep containers securely sealed.
	▶ Store in a cool, dry, well-ventilated area.
	Store away from incompatible materials and foodstuff containers.

# Conditions for safe storage, including any incompatibilities

- ▶ Metal can or drum
- ▶ Packaging as recommended by manufacturer.

	► Check all containers are clearly labelled and free from leaks.
Storage incompatibility	<ul><li>Avoid strong acids, bases.</li><li>Avoid reaction with oxidising agents</li></ul>

#### SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

# **Control parameters**

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Not Available

#### **EMERGENCY LIMITS**

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
bisphenol A/ diglycidyl ether resin, liquid	Epoxy resin includes EPON 1001, 1007, 820, ERL-2795	90 mg/m3	990 mg/m3	5,900 mg/m3

Ingredient	Original IDLH	Revised IDLH
bisphenol A/ diglycidyl ether resin, liquid	Not Available	Not Available
bisphenol F/ epichlorohydrin copolymer	Not Available	Not Available
(C12-14)alkylglycidyl ether	Not Available	Not Available

### **Exposure controls**

# Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

# Personal protection











# Eye and face protection

- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.

# Skin protection

#### See Hand protection below

# NOTE:

- The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.
- ► Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has

# Hands/feet protection

to be observed when making a final choice. Personal hygiene is a key element of effective hand care.

- When handling liquid-grade epoxy resins wear chemically protective gloves (e.g nitrile or nitrile-butatoluene rubber), boots and aprons.
- DO NOT use cotton or leather (which absorb and concentrate the resin), polyvinyl chloride, rubber or polyethylene gloves (which absorb the resin).
- ▶ DO NOT use barrier creams containing emulsified fats and oils as these may absorb the resin; silicone-based barrier creams should be reviewed prior to use.

# Body protection

See Other protection below

# Other protection

- Overalls.
- P.V.C. apron.Barrier cream.
- Thermal hazards

Not Available

# Respiratory protection

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Required minimum protection factor	Maximum gas/vapour concentration present in air p.p.m. (by volume)	Half-face Respirator	Full-Face Respirator
up to 10	1000	A-AUS / Class1 P2	-
up to 50	1000	-	A-AUS / Class 1 P2
up to 50	5000	Airline *	-
up to 100	5000	-	A-2 P2
up to 100	10000	-	A-3 P2
100+			Airline**

<sup>\* -</sup> Continuous Flow \*\* - Continuous-flow or positive pressure demand

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

# **SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

# Information on basic physical and chemical properties

Appearance	Yellow clear liquid with a mild odour; does not mix with water.		
Physical state	Liquid	Relative density (Water = 1)	1.10-1.15 @ 25 C
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	~7 @ 20 C	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	>200	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	>155	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	0.00001 @ 20 C	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

# **SECTION 10 STABILITY AND REACTIVITY**

Reactivity	See section 7
Chemical stability	<ul> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul>
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

# **SECTION 11 TOXICOLOGICAL INFORMATION**

# Information on toxicological effects

Inhaled	Acute effects from inhalation of high vapour concentrations may be chest and nasal irritation with coughing, sneezing, headache and even nausea.
Ingestion	Ingestion may result in nausea, abdominal irritation, pain and vomiting

# The material may accentuate any pre-existing dermatitis condition Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. The material may cause moderate inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering. Eye This material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Moderate inflammation may be expected with redness; conjunctivitis may occur with prolonged exposure. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population.

Chronic

population.

Bisphenol A diglycidyl ethers (BADGEs) produce a sensitization dermatitis (skin inflammation) characterized by eczema

with blisters and papules, with considerable itching of the back of the hand. This may persist for 10-14 days after withdrawal from exposure and recur immediately on re-exposure. The dermatitis may last longer following each exposure, but is unlikely to become more intense. Lower molecular weight species produce sensitization more readily.

Glycidyl ethers can cause genetic damage and cancer.

Bisphenol F, bisphenol A, fluorine-containing bisphenol A (bisphenol AF) and other diphenylalkanes were found to have oestrogen-like effects. Bisphenol F is present in the environment and as a contaminant of food, so humans may therefore be exposed to bisphenol. Testing shows bisphenol F has genetic toxicity as well as the ability to disrupt hormonal balance.

Bisphenol A may have effects similar to female sex hormones and when administered to pregnant women, may damage the foetus. It may also damage male reproductive organs and sperm.

Legend:	Skin : Moderate  1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS.		
		Skin (rabbit): moderate	
		Skin (human): non- sensitiser	
(C12-14)alkylglycidyl ether		Skin (human): Irritant	
(C40.44) all miled to \$2.55		Skin (guinea pig): sensitiser	
	Oral (rat) LD50: >10000 mg/kg <sup>[2]</sup>	Eye (rabbit): mild [Ciba]	
	TOXICITY	IRRITATION	
copolymer	Oral (rat) LD50: >2000 mg/kg <sup>[1]</sup>	i	
epichlorohydrin	dermal (rat) LD50: >400 mg/kg <sup>[2]</sup>	Not Available	
bisphenol F/	TOXICITY	IRRITATION	
	Oral (rat) LD50: >1000 mg/kg <sup>[2]</sup>	<u> </u>	
bisphenol A/ diglycidyl ether resin, liquid	dermal (rat) LD50: >1200 mg/kg <sup>[2]</sup>	Eye (rabbit): 100mg - Mild	
	TOXICITY	IRRITATION	
	Oral (Rat) LD50: >5000 mg/kg <sup>[2]</sup>	Not Available	
Epoxy Cast 375 gm Part A	TOXICITY	IRRITATION	

The chemical structure of hydroxylated diphenylalkanes or bisphenols consists of two phenolic rings joined together through a bridging carbon. This class of endocrine disruptors that mimic oestrogens is widely used in industry, particularly in plastics

Bisphenol A (BPA) and some related compounds exhibit oestrogenic activity in human breast cancer cell line MCF-7, but there were remarkable differences in activity. Several derivatives of BPA exhibited significant thyroid hormonal activity towards rat pituitary cell line GH3, which releases growth hormone in a thyroid hormone-dependent manner. However, BPA and several other derivatives did not show such activity.

The substance is classified by IARC as Group 3:

# BISPHENOL A/ DIGLYCIDYL ETHER RESIN, LIQUID

NOT classifiable as to its carcinogenicity to humans.

Evidence of carcinogenicity may be inadequate or limited in animal testing.

Animal testing over 13 weeks showed bisphenol A diglycidyl ether (BADGE) caused mild to moderate, chronic, inflammation of the skin.

Reproductive and Developmental Toxicity: Animal testing showed BADGE given over several months caused reduction in body weight but had no reproductive effects.

Cancer-causing potential: It has been concluded that bisphenol A diglycidyl ether cannot be classified with respect to its cancer-causing potential in humans.

Genetic toxicity: Laboratory tests on genetic toxicity of BADGE have so far been negative.

Foetoxicity has been observed in animal studies Oral (rabbit, female) NOEL 180 mg/kg (teratogenicity; NOEL (maternal 60 mg/kg

BISPHENOL A/
DIGLYCIDYL ETHER
RESIN, LIQUID &
(C12-14)ALKYLGLYCIDYL
ETHER

The following information refers to contact allergens as a group and may not be specific to this product.

Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions.

Acute Toxicity	×	Carcinogenicity	0
Skin Irritation/Corrosion	✓	Reproductivity	0
Serious Eye Damage/Irritation	<b>~</b>	STOT - Single Exposure	0
Respiratory or Skin sensitisation	<b>~</b>	STOT - Repeated Exposure	0
Mutagenicity	0	Aspiration Hazard	0

**Legend: X** − Data available but does not fill the criteria for classification

✓ – Data available to make classification

# **SECTION 12 ECOLOGICAL INFORMATION**

# **Toxicity**

	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
Epoxy Cast 375 gm Part A		TEST DURATION (HR)	SPECIES		
	Not Available	Not Available	Not Available	Not Available	Not Available
bisphenol A/ diglycidyl ether resin, liquid	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	1.2mg/L	2
	EC50	72	Algae or other aquatic plants	9.4mg/L	2
	NOEC	72	Algae or other aquatic plants	2.4mg/L	2
bisphenol F/ epichlorohydrin copolymer	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	0.55mg/L	2
	EC50	48	Crustacea	1.6mg/L	2
	EC50	72	Algae or other aquatic plants	>1.8mg/L	2
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
(C12-14)alkylglycidyl ether	Not Available	Not Available	Not Available	Not Available	Not Available
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity				
	Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data				

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

DO NOT discharge into sewer or waterways.

# Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
bisphenol A/ diglycidyl ether resin, liquid	HIGH	HIGH

# **Bioaccumulative potential**

Ingredient	Bioaccumulation
bisphenol A/ diglycidyl ether resin, liquid	LOW (LogKOW = 2.6835)

# Mobility in soil

Ingredient	Mobility
bisphenol A/ diglycidyl ether resin, liquid	LOW (KOC = 51.43)

# **SECTION 13 DISPOSAL CONSIDERATIONS**

# Waste treatment methods

**Product / Packaging** disposal

- ▶ Containers may still present a chemical hazard/ danger when empty.
- ▶ Return to supplier for reuse/ recycling if possible.

Fig. If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used

- ▶ to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
- ▶ Where possible retain label warnings and SDS and observe all notices pertaining to the product.
- ▶ DO NOT allow wash water from cleaning or process equipment to enter drains.
- ▶ It may be necessary to collect all wash water for treatment before disposal.
- ▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- ▶ Where in doubt contact the responsible authority.
- ▶ Recycle wherever possible or consult manufacturer for recycling options.
- ► Consult State Land Waste Authority for disposal.
- ▶ Bury or incinerate residue at an approved site.
- $\blacksquare \ \, \text{Recycle containers if possible, or dispose of in an authorised landfill.}$

# **SECTION 14 TRANSPORT INFORMATION**

# **Labels Required**



# Marine Pollutant



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# Land transport (ADG)

UN number	3082		
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains bisphenol A/ diglycidyl ether resin, liquid)		
Transport hazard class(es)	Class 9 Subrisk Not Applicable		
Packing group	III		
Environmental hazard	Environmentally hazardous		
Special precautions for user	Special provisions 274 331 335 375 AU01  Limited quantity 5 L		

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in;

- (a) packagings;
- (b) IBCs; or
- (c) any other receptacle not exceeding 500 kg(L).
- Australian Special Provisions (SP AU01) ADG Code 7th Ed.

# Air transport (ICAO-IATA / DGR)

UN number	3082				
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. * (contains bisphenol A/ diglycidyl ether resin, liquid)				
Transport hazard	ICAO/IATA Class	9 Not Applicable			
class(es)	ERG Code 9L				
Packing group	III				
Environmental hazard	Environmentally hazardous				
	Special provisions		. A97 A158 A197		
	Cargo Only Packing I	nstructions	964		
	Cargo Only Maximum	Qty / Pack	450 L		
Special precautions for user	Passenger and Cargo	Packing Instructions	964		
	Passenger and Cargo	Maximum Qty / Pack	450 L		
	Passenger and Cargo	Limited Quantity Packing Instructions	Y964		
	Passenger and Cargo	Limited Maximum Qty / Pack	30 kg G		

# Sea transport (IMDG-Code / GGVSee)

UN number

3082

UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains bisphenol A/ diglycidyl ether resin, liquid)			
Transport hazard class(es)	IMDG Class 9  IMDG Subrisk Not Applicable			
Packing group	III			
Environmental hazard	Marine Pollutant			
Special precautions for user	EMS Number F-A , S-F Special provisions 274 335 969 Limited Quantities 5 L			

# Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

# **SECTION 15 REGULATORY INFORMATION**

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

# BISPHENOL A/ DIGLYCIDYL ETHER RESIN, LIQUID(25068-38-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS

# BISPHENOL F/ EPICHLOROHYDRIN COPOLYMER(9003-36-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Inventory of Chemical Substances (AICS)

## (C12-14)ALKYLGLYCIDYL ETHER(68609-97-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Substan	ces Information System - Consolidated Lists Australia Inventory of Chemical Substances (AICS)
National Inventory	Status
Australia - AICS	Υ
Canada - DSL	Υ
Canada - NDSL	N ((C12-14)alkylglycidyl ether; bisphenol A/ diglycidyl ether resin, liquid; bisphenol F/ epichlorohydrin copolymer)
China - IECSC	Υ
Europe - EINEC / ELINCS / NLP	Υ
Japan - ENCS	N ((C12-14)alkylglycidyl ether; bisphenol A/ diglycidyl ether resin, liquid; bisphenol F/ epichlorohydrin copolymer)
Korea - KECI	Υ
New Zealand - NZIoC	Y
Philippines - PICCS	Υ
USA - TSCA	Υ
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

### **SECTION 16 OTHER INFORMATION**

#### Other information

# Ingredients with multiple cas numbers

Name	CAS No
bisphenol A/ diglycidyl ether resin, liquid	25068-38-6, 25085-99-8
bisphenol F/ epichlorohydrin copolymer	9003-36-5, 55492-52-9

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

# **Definitions and abbreviations**

PC-TWA: Permissible Concentration-Time Weighted Average

PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit。

IDLH: Immediately Dangerous to Life or Health Concentrations

OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index

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