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# Safety Data Sheet in accordance with HSNO

Printing date 20.02.2024 Version number 17 (replaces version 16) Revision: 20.02.2024

# **SECTION 1: Identification of the substance or mixture and of the supplier**

· Product identifier

· Trade name: GC6B / GC4

· Article number: 32220-3055-5

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

No further relevant information available.

· Application of the substance / the mixture Adhesives

Details of the supplier of the safety data sheet

· Supplier:

Alfa Laval Technologies AB

SE-221 00 Lund

Sweden

+46 46 36 65 00

info.se@alfalaval.com

New Zealand Supplier:

Alfa Laval New Zealand Ltd

PO Box 20424, Te Rapa - Hamilton, - New Zealand

Visit: 307 Sandwich Road - Te Rapa, Hamilton, - New Zealand Tel switchboard: +64 7 849 6025 - Fax switchboard: +64 7 849 46 19

http://www.alfalaval.co.nz - newzealand.info@alfalaval.com

· Further information obtainable from:

For further questions regarding the safety data sheet, please contact your local Alfa Laval Sales Company which you find at www.alfalaval.com or in section 16 "Other Information" in the end of the safety data sheet

**Emergency telephone number:** 

New Zealand:

Emergency service number: 111

National poisons centre phone: 0800 764 766.

#### **SECTION 2: Hazards identification**

· Classification of the substance or mixture

Self-heat. 1 H251 Self-heating; may catch fire. Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

- · Label elements
- · GHS label elements

The product is classified and labelled according to the Globally Harmonised System (GHS).

· Hazard pictograms







GHS02 GHS07 GHS09

· Signal word Danger

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#### · Hazard-determining components of labelling:

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq$  700)

#### Hazard statements

H251 Self-heating; may catch fire.

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 statements

P280 Wear protective clothing / face protection.

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.

P413 Store bulk masses greater than 1 kg at temperatures not exceeding 5°C.

P501 Dispose of contents/container in accordance with local/regional/national/

international regulations.

#### Other hazards

- · Results of PBT and vPvB assessment
- · PBT: The product is not, nor contains, a substance that is, PBT.
- · vPvB: The product is not, nor contains a substance that is, vPvB.

## **SECTION 3: Composition/Information on ingredients**

- · Mixtures
- · **Description:** Mixture: consisting of the following components.

_	•	3 1			
	Dangerous components:				
Ī	CAS: 25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number	50-100%		
	NLP: 500-033-5	average molecular weight ≤ 700)			
		Aquatic Chronic 2, H411; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317			
Ī	Non-dangerous components				
Γ		Non-volatile amide			
ſ	CAS: 112945-52-5	Amorphous silica, crystalline free, synthetic	2.5-10%		

#### Additional information:

If no ATE values are displayed, please refer to LD50/LC50 values in Section 11.

For the wording of the listed hazard phrases refer to section 16.

## **SECTION 4: First aid measures**

### Description of first aid measures

#### · General information:

Immediately remove any clothing soiled by the product.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

#### · After inhalation:

Supply fresh air.

Seek medical treatment if symptoms persists.

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· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact:

Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If symptoms persist consult a doctor.

After swallowing:

Rinse the mouth with water.

If symptoms persist consult a doctor.

· Most important symptoms and effects, both acute and delayed

No further relevant information available.

· Indication of any immediate medical attention and special treatment needed

No further relevant information available.

# **SECTION 5: Fire fighting measures**

- Extinguishing media
- Suitable extinguishing agents:

Water spray

Foam

Use fire extinguishing methods suitable to surrounding conditions.

- · For safety reasons unsuitable extinguishing agents: Not applicable.
- Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

In case of fire, the following can be released:

Nitrogen oxides (NOx)

Hydrogen chloride (HCI)

Carbon monoxide and carbon dioxide

Aldehyde

- Advice for firefighters
- · Protective equipment:

Wear fully protective suit.

Do not inhale explosion gases or combustion gases.

Wear self-contained respiratory protective device.

Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.

Formation of toxic gases is possible during heating or in case of fire.

# **SECTION 6: Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures

Absorb liquid components with liquid-binding material.

Keep away from ignition sources.

Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

In case of seepage into the ground inform responsible authorities.

Send for recovery or disposal in suitable receptacles.

- Methods and material for containment and cleaning up: Pick up mechanically.
- Reference to other sections

See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

# **SECTION 7: Handling and storage**

#### · Precautions for safe handling

Do not breathe vapour.

Avoid contact with skin and eyes.

Handle and open container with care.

Avoid release to the environment.

This material and its container must be disposed of in a safe way.

See Section 8 for information on personal protection equipment.

- · Information about fire and explosion protection: Substance/product is self ignitable.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Keep away from heat and direct sunlight.

Store in a cool location.

- · Information about storage in one common storage facility: Reacts with amines.
- Further information about storage conditions: Keep container tightly sealed.
- · Recommended storage temperature: -18 4 °C
- · Specific end use(s)

. Adhesives

Only for trade users / technical specialists

## **SECTION 8: Exposure controls/personal protection**

- · Control parameters
- Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

DNELs

25068-38-6 Epoxy resin system, Bisphenol-A and epichlorhydrin, reaction product, MW<700: Hazard via inhalation route: Long time exposure: 12.25 mg/m³; Acute/short term exposure: 12.25 mg/m³. Repeated dose toxicity. Overall assessment factor: 12. Dose descriptor starting point: NOAEC.

**PNECs** 

25068-38-6 Epoxy resin system, Bisphenol-A and epichlorhydrin, reaction product, MW<700: Aqua (freshwater): 0.006 mg/L, Assessment factor: 50, Extrapolation method: Assessment factor.

- · **Additional information:** The lists valid during the making were used as basis.
- · Exposure controls
- · Appropriate engineering controls No further data; see section 7.
- Individual protection measures, such as personal protective equipment
- General protective and hygienic measures:

Ensure that washing facilities are available at the work place.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Use only in well-ventilated areas.

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In case of insufficient ventilation, wear suitable respiratory equipment.

Respiratory protection:

Not necessary if room is well-ventilated.

Filter P2 Filter P3

· Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

## · Material of gloves

polymer laminate

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product 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.

#### · Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection



Tightly sealed goggles

· Environmental exposure controls Do not allow to enter sewers/ surface or ground water.

# **SECTION 9: Physical and chemical properties**

- · Information on basic physical and chemical properties
- General Information

Colour: Light beige
 Odour: Characteristic
 Odour threshold: Not determined.
 Melting point/freezing point: Undetermined.

Boiling point or initial boiling point and

boiling range Undetermined.

• Flammability Self-heating; may catch fire.

· Lower and upper explosion limit

Lower: Not applicable.
 Upper: Not applicable.
 Flash point: ≥107 °C
 Decomposition temperature: Not determined.

Decomposition temperature: Not determined.pH Not applicable.

Viscosity:

· Kinematic viscosity 24193 mm2/s

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· Dynamic:

· Solubility

· water:

Partition coefficient n-octanol/water (log

value)

· Vapour pressure:

· Density and/or relative density

Density at 20 °C:

· Relative density at 20 °C

· Vapour density

· Other information

· Appearance:

Form:

· Ignition temperature: **Explosive properties:** 

· Change in condition

· Drip point:

Oxidising properties

· Evaporation rate

Not applicable.

Slightly soluble.

Not determined.

Not determined.

1.24 g/cm<sup>3</sup>

1.22-1.26 (Water = 1)

Not applicable.

Highly viscous

Not determined.

Product does not present an explosion hazard.

Not applicable. Not applicable.

Self-heating; may catch fire.

· Information with regard to physical hazard classes

· Explosives Void Flammable gases Void · Aerosols Void Oxidising gases Void · Gases under pressure Void · Flammable liquids Void · Flammable solids Void · Self-reactive substances and mixtures Void · Pyrophoric liquids Void · Pyrophoric solids Void

· Self-heating substances and mixtures

· Substances and mixtures, which emit

flammable gases in contact with water Void **Oxidising liquids** Void **Oxidising solids** Void Organic peroxides Void **Corrosive to metals** Void Void Desensitised explosives

# **SECTION 10: Stability and reactivity**

- · Reactivity No further data; see section 7.
- · Chemical stability

Stable under normal temperature conditions and under recommended usage and storage.

- · Thermal decomposition / conditions to be avoided: Exothermic thermal decomposition.
- Possibility of hazardous reactions

Exothermic polymerisation.

130°C

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#### · Conditions to avoid

Keep away from heat.

Keep away from sources of ignition - No smoking.

Avoid curing large quantities to prevent premature reaction (exothermic) with excessive heat and smoke.

#### · Incompatible materials:

Reacts with amines.

Keep away from acids.

## Hazardous decomposition products:

Nitrogen oxides

Carbon monoxide and carbon dioxide

Aldehyde

Hydrogen chloride (HCI)

No further data; see section 7.

## **SECTION 11: Toxicological information**

· Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

CAS: 25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Oral NOAEL 750 mg/kg (Rat) (2 generations)

#### LD/LC50 values relevant for classification:

25068-38-6 Epoxy resin system, Bisphenol-A and epichlorhydrin, reaction product, MW<700:

LD50: 13600 mg/kg, Oral Rat.

LD50: >1200 mg/kg, Dermal Rat.

# CAS: 25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Dermal LD50 >1,600 mg/kg (Rat)

#### Skin corrosion/irritation

Causes skin irritation.

# CAS: 25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Irritation of skin Skin Corrosion/Irritation 4 (rabbit) (OECD Guideline 404)

#### Serious eye damage/irritation

Causes serious eye irritation.

# CAS: 25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Irritation of eyes | Serious Eye Damage/Irritation | (rabbit) (OECD Guideline 405)

#### · Respiratory or skin sensitisation

May cause an allergic skin reaction.

- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

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- · Additional toxicological information:
- · Repeated dose toxicity Sensitising effect by skin contact is possible by prolonged exposure.
- · Information on other hazards
- · Endocrine disrupting properties

Endocrine disrupting properties from https://edlists.org

None of the ingredients is listed.

## **SECTION 12: Ecological information**

- · Toxicity
- Aquatic toxicity:

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

# CAS: 25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) LC50 (96 h) 1.75 mg/L (fish) (OECD Guideline 203)

EC50 220 mg/L (algae) EC50 1.1-3.6 mg/L (Daphnia)

- Persistence and degradability No further relevant information available.
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- **Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

- · Other adverse effects No further relevant information available.
- · Remark:

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

## **SECTION 13: Disposal considerations**

- · Waste treatment methods
- Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Hand over to hazardous waste disposers.

- · Uncleaned packaging:
- Recommendation:

Disposal must be made according to official regulations.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

## **SECTION 14: Transport information**

- · UN number or ID number
- NZS/RID/ADN, IMDG, IATA UN3088

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Trade name: GC6B / GC4

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· UN proper shipping name · NZS/RID/ADN  · IMDG · IATA	3088 SELF-HEATING SOLID, ORGANIC, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)), ENVIRONMENTALLY HAZARDOUS SELF-HEATING SOLID, ORGANIC, N.O.S. (HYDRAZIDE), MARINE POLLUTANT SELF-HEATING SOLID, ORGANIC, N.O.S. (HYDRAZIDE)
· Transport hazard class(es)	
· NZS/RID/ADN, IMDG	
· Class · Label	4.2 Substances liable to spontaneous combustion. 4.2
· IATA	
· Class · Label	<ul><li>4.2 Substances liable to spontaneous combustion.</li><li>4.2</li></ul>
· Packing group · NZS/RID/ADN, IMDG, IATA	П
· Environmental hazards: · Marine pollutant:	Environmentally hazardous substance, solid Yes Symbol (fish and tree)
· Special marking (NZS/RID/ADN):	Symbol (fish and tree)
Special precautions for user	Warning: Substances liable to spontaneous combustion.
<ul> <li>Hazard identification number (Kemler code)</li> <li>EMS Number:</li> <li>Stowage Category</li> </ul>	: 40 F-A,S-J A
<ul> <li>Maritime transport in bulk according to IMO instruments</li> </ul>	Not applicable.
· Transport/Additional information:	
NZS/RID/ADN Limited quantities (LQ) Transport category Tunnel restriction code	0 2 D/E
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· IMDG · Limited quantities (LQ)	0
· UN "Model Regulation":	UN 3088 SELF-HEATING SOLID, ORGANIC, N.O.S. (REACTION PRODUCT: BISPHENOL-A-(EPICHLORHYDRIN) EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT ≤ 700)), 4.2, II, ENVIRONMENTALLY HAZARDOUS

# **SECTION 15: Regulatory information**

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

EU Regulation (EC) no.1907/2006 (REACH)

· New Zealand Inve	· New Zealand Inventory of Chemicals			
	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight $\leq 700)$			
CAS: 112945-52-5	Amorphous silica, crystalline free, synthetic			
· HSNO Approval numbers				
None of the ingredi	None of the ingredients is listed.			

# · GHS label elements

The product is classified and labelled according to the Globally Harmonised System (GHS).

· Hazard pictograms







GHS02 GHS07 GHS09

- · Signal word Danger
- Hazard-determining components of labelling:

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight < 700)

#### **Hazard statements**

H251 Self-heating; may catch fire.

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 statements**

P280 Wear protective clothing / face protection.

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.

P413 Store bulk masses greater than 1 kg at temperatures not exceeding 5°C.

P501 Dispose of contents/container in accordance with local/regional/national/

international regulations.

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- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- Seveso category E2 Hazardous to the Aquatic Environment
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. LIMITATION OF LIABILITY

This document is only intended to be used as guidance as regards the risks of which we are aware that are associated with the product. Every individual who works with the product or in close proximity of it must receive suitable training. Individuals who come into contact with the product must be capable of using their own judgement as regards conditions or methods for handling, storing and using the product. Alfa Laval is not liable for demands, losses or damage of any kind that arise from flaws or deficiencies in this document or from using, handling, storing or disposing of the product unless it can be proven that Alfa Laval has acted in a grossly negligent manner. Beyond what has been agreed upon and specified in writing with Alfa Laval in the individual case, Alfa Laval makes no promises or assumes any liability, including but not limited to implicit guarantees regarding marketability or appropriateness in terms of both the information provided in this document and the product to which the information refers.

Please contact your local Alfa Laval Sales Company for further questions.

# · Relevant phrases

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

## · Department issuing SDS: Alfa Laval Sustainability Environment

#### Contact:

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United States: customerservice.usa@alfalaval.com

Venezuela: venezuela.info@alfalaval.com Vietnam: vietnam.info@alfalaval.com

#### Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning

the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

Self-heat. 1: Self-heating substances and mixtures – Category 1 Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation - Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation - Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

#### \* Data compared to the previous version altered.