Davco Epoxy Grout Part A Resin

Parex Group (ParexGroup)

Chemwatch: 4762-85
Version No: 2.1.1.1
Safety Data Sheet according to WHS and ADG requirements

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

Product Identifier

<table>
<thead>
<tr>
<th>Product name</th>
<th>Davco Epoxy Grout Part A Resin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms</td>
<td>Not Available</td>
</tr>
<tr>
<td>Proper shipping name</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains bisphenol A/ diglycidyl ether polymer, high molecular weight)</td>
</tr>
<tr>
<td>Other means of identification</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

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

Use according to manufacturer's directions. Requires that the two parts be mixed by hand or mixer before use, in accordance with manufacturers directions. Mix only as much as is required. Do not return the mixed material to the original containers. The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing.

Details of the supplier of the safety data sheet

<table>
<thead>
<tr>
<th>Registered company name</th>
<th>Parex Group (ParexGroup)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>67 Elizabeth Street Wetherill Park NSW 2164 Australia</td>
</tr>
<tr>
<td>Telephone</td>
<td>+61 2 9616.3000</td>
</tr>
<tr>
<td>Fax</td>
<td>+61 2 9725 5551</td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://www.davco.com.au">www.davco.com.au</a></td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:marketing@davco.com.au">marketing@davco.com.au</a></td>
</tr>
</tbody>
</table>

Emergency telephone number

Association / Organisation Not Available
Emergency telephone numbers 1800 039 008
Other emergency telephone numbers Not Available

CHEMWATCH EMERGENCY RESPONSE

Primary Number Alternative Number 1 Alternative Number 2
1800 039 008 1800 039 008 +612 9186 1132

Once connected and if the message is not in your preferred language then please dial 01

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

<table>
<thead>
<tr>
<th>CHEMICAL HAZARD RATINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Flammability</td>
</tr>
<tr>
<td>Toxicity</td>
</tr>
<tr>
<td>Body Contact</td>
</tr>
<tr>
<td>Reactivity</td>
</tr>
<tr>
<td>Chronic</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Poisons Schedule Classification [1]</th>
</tr>
</thead>
<tbody>
<tr>
<td>S5</td>
</tr>
</tbody>
</table>

Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Skin Sensitizer Category 1, Carcinogenicity Category 2, Acute Aquatic Hazard Category 2, Chronic Aquatic Hazard Category 2


Label elements

Continued...
Hazard pictogram(s)

SIGNAL WORD WARNING

Hazard statement(s)
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s) Prevention
P201 Obtain special instructions before use.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P281 Use personal protective equipment as required.
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
P308+P313 IF exposed or concerned: Get medical advice/attention.
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.
P337+P313 If eye irritation persists: Get medical advice/attention.

Precautionary statement(s) Storage
P405 Store locked up.

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

<table>
<thead>
<tr>
<th>CAS No</th>
<th>% (weight)</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6</td>
<td>30–60</td>
<td>bisphenol A/ diglycidyl ether polymer, high molecular weight</td>
</tr>
<tr>
<td>55492-52-9</td>
<td>0–10</td>
<td>bisphenol F/ epichlorohydrin copolymer</td>
</tr>
<tr>
<td>2461-15-6</td>
<td>0–10</td>
<td>2-ethylhexyl glycidyl ether</td>
</tr>
</tbody>
</table>

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
If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
- Transport to hospital, or doctor.
Ingestion

IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.

- For advice, contact a Poisons Information Centre or a doctor.
- Urgent hospital treatment is likely to be needed.
- In the mean time, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition.
- If the services of a medical officer or medical doctor are readily available, the patient should be placed in his/her care and a copy of the SDS should be provided. Further action will be the responsibility of the medical specialist.
- If medical attention is not available on the worksite or surroundings send the patient to a hospital together with a copy of the SDS.

Where medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise:

- INDUCE vomiting with fingers down the back of the throat, ONLY IF CONSCIOUS. Lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- NOTE: Wear a protective glove when inducing vomiting by mechanical means.

Indication of any immediate medical attention and special treatment needed

As in all cases of suspected poisoning, follow the ABCDEs of emergency medicine (airway, breathing, circulation, disability, exposure), then the ABCDEs of toxicology (antidotes, basics, change absorption, change distribution, change elimination).

For poisons (where specific treatment regime is absent):

BASIC TREATMENT

- Establish a patent airway with suction where necessary.
- Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- Administer oxygen by non-rebreather mask at 10 to 15 L/min.
- Monitor and treat, where necessary, for pulmonary oedema.
- Monitor and treat, where necessary, for shock.
- Anticipate seizures.
- DO NOT use emetics. Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.

ADVANCED TREATMENT

- Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.
- Positive-pressure ventilation using a bag-valve mask might be of use.
- Monitor and treat, where necessary, for arrhythmias.
- Start an IV DSW TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
- Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.
- Treat seizures with diazepam.
- Proparacaine hydrochloride should be used to assist eye irrigation.

BRONSTEIN, A.C. and CURRANCE, P.L.
EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- Water spray or fog.
- Alcohol stable foam.
- Dry chemical powder.
- 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.
- Avoid spraying water onto liquid pools.
- DO NOT approach containers suspected to be hot.

Fire/Explosion Hazard

- Combustible.
- Slight fire hazard when exposed to heat or flame.
- Heating may cause expansion or decomposition leading to violent rupture of containers.
- On combustion, may emit toxic fumes of carbon monoxide (CO).
- May emit acid smoke.
- Mists containing combustible materials may be explosive.
- Combustion products include: carbon dioxide (CO2), aldehydes, other pyrolysis products typical of burning organic material.

HAZCHEM •3Z

SECTION 6 ACCIDENTAL RELEASE MEASURES

Continued...
Personal precautions, protective equipment and emergency procedures
See section 8

Environmental precautions
See section 12

Methods and material for containment and cleaning up

<table>
<thead>
<tr>
<th>Minor Spills</th>
<th>Environmental hazard - contain spillage.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Clean up all spills immediately.</td>
</tr>
<tr>
<td></td>
<td>Avoid breathing vapours and contact with skin and eyes.</td>
</tr>
<tr>
<td></td>
<td>Control personal contact with the substance, by using protective equipment.</td>
</tr>
<tr>
<td></td>
<td>Contain and absorb spill with sand, earth, inert material or vermiculite.</td>
</tr>
<tr>
<td></td>
<td>Wipe up.</td>
</tr>
<tr>
<td></td>
<td>Place in a suitable, labelled container for waste disposal.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major Spills</th>
<th>Environmental hazard - contain spillage.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Moderate hazard.</td>
</tr>
<tr>
<td></td>
<td>Clear area of personnel and move upwind.</td>
</tr>
<tr>
<td></td>
<td>Alert Fire Brigade and tell them location and nature of hazard.</td>
</tr>
<tr>
<td></td>
<td>Wear breathing apparatus plus protective gloves.</td>
</tr>
<tr>
<td></td>
<td>Prevent, by any means available, spillage from entering drains or water course.</td>
</tr>
<tr>
<td></td>
<td>No smoking, naked lights or ignition sources.</td>
</tr>
</tbody>
</table>

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

<table>
<thead>
<tr>
<th>Safe handling</th>
<th>DO NOT allow clothing wet with material to stay in contact with skin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Avoid all personal contact, including inhalation.</td>
</tr>
<tr>
<td></td>
<td>Wear protective clothing when risk of exposure occurs.</td>
</tr>
<tr>
<td></td>
<td>Use in a well-ventilated area.</td>
</tr>
<tr>
<td></td>
<td>Prevent concentration in hollows and sumps.</td>
</tr>
<tr>
<td></td>
<td>DO NOT enter confined spaces until atmosphere has been checked.</td>
</tr>
<tr>
<td></td>
<td>Avoid smoking, naked lights or ignition sources.</td>
</tr>
</tbody>
</table>

Other information

<table>
<thead>
<tr>
<th>Suitable container</th>
<th>Metal can or drum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Packaging as recommended by manufacturer.</td>
</tr>
<tr>
<td></td>
<td>Check all containers are clearly labelled and free from leaks.</td>
</tr>
</tbody>
</table>

Conditions for safe storage, including any incompatibilities

<table>
<thead>
<tr>
<th>Storage incompatibility</th>
<th>Avoid reaction with oxidising agents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Avoid strong acids, bases.</td>
</tr>
</tbody>
</table>

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

<table>
<thead>
<tr>
<th>OCCUPATIONAL EXPOSURE LIMITS (OEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>INGREDIENT DATA</td>
</tr>
<tr>
<td>Not Available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EMERGENCY LIMITS</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Material name</th>
<th>TEEL-1</th>
<th>TEEL-2</th>
<th>TEEL-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>bisphenol A/ diglycidyl ether polymer, high molecular weight</td>
<td>Epoxy resin includes EPON 1001, 1007, 820, ERL-2795</td>
<td>90 mg/m³</td>
<td>990 mg/m³</td>
<td>5,900 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Original IDLH</th>
<th>Revised IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>bisphenol A/ diglycidyl ether polymer, high molecular weight</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>bisphenol F/ epichlorohydrin copolymer</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>2-ethylhexyl glycidyl ether</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

Exposure controls

<table>
<thead>
<tr>
<th>Appropriate engineering controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td>Enclosure and/or isolation of emission source which keeps a selected hazard &quot;physically&quot; away from the worker and ventilation that strategically &quot;adds&quot; and &quot;removes&quot; air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must...</td>
</tr>
</tbody>
</table>
match the particular process and chemical or contaminant in use.

### Personal 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. This should include a review of lens absorption and adhesion for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available.

### 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. This should include a review of lens absorption and adhesion for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available.

### Skin protection

See Hand protection below.

### Hands/feet protection

- 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.

NOTE:
- 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 to be checked prior to the application.
- The exact breakthrough time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.
- Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly.
- When handling liquid-grade epoxy resins wear chemically protective gloves (e.g. nitrile or nitrile-butyl-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.
- Skin cleansing cream.
- Eye wash unit.

### Thermal hazards

Not Available

### Respiratory protection


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.

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

* 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)

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Appearance</th>
<th>White liquid with a slight odour; miscible with water.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odour</td>
<td>Not Available</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not Available</td>
</tr>
<tr>
<td>pH (as supplied)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Melting point / freezing point (°C)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range (°C)</td>
<td>&gt;200</td>
</tr>
<tr>
<td>Flash point (°C)</td>
<td>&gt;100 (PMCC)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not Available</td>
</tr>
</tbody>
</table>
SECTION 10 STABILITY AND REACTIVITY

Reactivity
See section 7

Chemical stability
▶ Unstable in the presence of incompatible materials.
▶ Product is considered stable.
▶ Hazardous polymerisation will not occur.

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

Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful. There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body’s response to such irritation can cause further lung damage.

Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.

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. Skin contact with the material may damage the health of the individual; systemic effects may result following absorption. Open cuts, abraded or irritated skin should not be exposed to this material.

There is some evidence that inhaling this product is more likely to cause a sensitisation reaction in some persons compared to the general population. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Based on experience with similar materials, there is a possibility that exposure to the material may reduce fertility in humans at levels which do not cause other toxic effects. 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.

### Davco Epoxy Grout Part A Resin

<table>
<thead>
<tr>
<th>Davco Epoxy Grout Part A Resin</th>
<th>TOXICITY</th>
<th>IRRITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOXICITY</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

### bisphenol A/ diglycidyl ether polymer, high molecular weight

<table>
<thead>
<tr>
<th>Davco Epoxy Grout Part A Resin</th>
<th>TOXICITY</th>
<th>IRRITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral (rat) LD50: &gt;1000 mg/kg&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Eye (rabbit): 100 mg - mild</td>
<td></td>
</tr>
</tbody>
</table>

### bisphenol F/ epichlorohydrin copolymer

<table>
<thead>
<tr>
<th>Davco Epoxy Grout Part A Resin</th>
<th>TOXICITY</th>
<th>IRRITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral (rat) LD50: &gt;400 mg/kg&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Not Available</td>
<td></td>
</tr>
</tbody>
</table>

### 2-ethylhexyl glycidyl ether

<table>
<thead>
<tr>
<th>Davco Epoxy Grout Part A Resin</th>
<th>TOXICITY</th>
<th>IRRITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral (rat) LD50: 7800 mg/kg&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Not Available</td>
<td></td>
</tr>
</tbody>
</table>

Legend:
1. Value obtained from Europe ECHA Registered Substances - Acute toxicity
2. Value obtained from manufacturer’s SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

No significant acute toxicological data identified in literature search. Oxiranes (including glycidyl ethers and allyl oxides, and epoxides) share many common characteristics with respect to animal toxicology. One such oxirane is ethyloxirane; data presented here may be taken as representative. For 1,2-butylen oxide (ethylloxirane); In animal testing, ethyloxirane increased the incidence of tumours of the airways in animals exposed via inhalation. However, tumours were not observed in mice chronically exposed via skin. Two structurally related substances, oxirane (ethylene oxide) and methylloxirane (propylene oxide), which are also direct-acting alkylating agents, have been classified as causing cancer.
BISPHENOL A / DIGLYCIDYL ETHER POLYMER, HIGH MOLECULAR WEIGHT

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. Results suggest that the 4-hydroxy group of the A-phenyl ring and the B-phenyl ring of BPA derivatives are required for these hormonal activities, and substituents at the 3,5-positions of the phenyl rings and the bridging alkylo moiety markedly influence the activities.

Bisphenols promoted cell proliferation and increased the synthesis and secretion of cell type-specific proteins.

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.

Immunotoxicity: Animal testing suggests regular injections of diluted BADGE may result in sensitization.

Consumer exposure: Consumer exposure to BADGE is almost exclusively from migration of BADGE from can coatings into food.

For RTECS No: SL 6475000: (liquid grade) Equivocal tumourigen by RTECS criteria. Somnolence, dyspnea, peritonitis

2-ETHYHEXYL GLYCIDYL ETHER

Asthma like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. On the other hand, industrial bronchitis is a disorder that occurs as a result of exposure due to high concentrations of irritating substance (often particles) and is completely reversible after exposure ceases.

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. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important. A weakly sensitising substance which is widely distributed can be a more important allergen than one with stronger sensitising potential with which few individuals come into contact.

Davco Epoxy Grout Part A Resin & BISPHENOL A / DIGLYCIDYL ETHER POLYMER, HIGH MOLECULAR WEIGHT & 2-ETHYHEXYL GLYCIDYL 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. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important. A weakly sensitising substance which is widely distributed can be a more important allergen than one with stronger sensitising potential with which few individuals come into contact.

The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

Acute Toxicity

Skin Irritation/Corrosion

Serious Eye Damage/Irritation

Respiratory or Skin sensitisation

Mutagenicity

Carcinogenicity

Reproductivity

STOT - Single Exposure

STOT - Repeated Exposure

Aspiration Hazard

Legend:  
- Data available but does not fill the criteria for classification

- Data available to make classification

- Data Not Available to make classification

**SECTION 12 ECOLOGICAL INFORMATION**

Toxicity

<table>
<thead>
<tr>
<th>ENDPOINT</th>
<th>TEST DURATION (HR)</th>
<th>SPECIES</th>
<th>VALUE</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
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</table>

bisphenol A/ diglycidyl ether polymer, high molecular weight

<table>
<thead>
<tr>
<th>ENDPOINT</th>
<th>TEST DURATION (HR)</th>
<th>SPECIES</th>
<th>VALUE</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50</td>
<td>96</td>
<td>Fish</td>
<td>1.2mg/L</td>
<td>2</td>
</tr>
<tr>
<td>EC50</td>
<td>72</td>
<td>Algae or other aquatic plants</td>
<td>9.4mg/L</td>
<td>2</td>
</tr>
<tr>
<td>NOEC</td>
<td>72</td>
<td>Algae or other aquatic plants</td>
<td>2.4mg/L</td>
<td>2</td>
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</tbody>
</table>

bisphenol F/ epichlorohydrin copolymer

<table>
<thead>
<tr>
<th>ENDPOINT</th>
<th>TEST DURATION (HR)</th>
<th>SPECIES</th>
<th>VALUE</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50</td>
<td>96</td>
<td>Fish</td>
<td>0.55mg/L</td>
<td>2</td>
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<tr>
<td>EC50</td>
<td>48</td>
<td>Crustacea</td>
<td>1.6mg/L</td>
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<tr>
<td>EC50</td>
<td>72</td>
<td>Algae or other aquatic plants</td>
<td>&gt;1.8mg/L</td>
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2-ethylhexyl glycidyl ether

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<tr>
<th>ENDPOINT</th>
<th>TEST DURATION (HR)</th>
<th>SPECIES</th>
<th>VALUE</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

Legend:  
Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12

Continued...
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters. Wastes resulting from use of the product must be disposed of on site or at approved waste sites. Significant environmental findings are limited. Oxyrines (including glycidyl ethers and alkyl oxides, and epoxides) exhibit common characteristics with respect to environmental fate and ecotoxicology. One such oxirane is ethyloxirane and data presented here may be taken as representative.

**For 1,2-Butylene oxide (Ethyloxirane):**

log Kow values of 0.68 and 0.86. BAF and BCF: 1 to 17 L/kg.

Aquatic Fate - Ethyloxirane is highly soluble in water and has a very low soil-adsorption coefficient, which suggests that, if released to water, adsorption of ethyloxirane to sediment and suspended solids is not expected. Volatilization of ethyloxirane from water surfaces would be expected. Ethyloxirane is hydrolysable, with a half-life of 6.5 days, and biodegradable up to 100% degradation and is not expected to persist in water. Models have predicted a biodegradation half-life in water of 15 days.

DO NOT discharge into sewer or waterways.

### Persistence and degradability

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Persistence: Water/Soil</th>
<th>Persistence: Air</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-ethylhexyl glycidyl ether</td>
<td>HIGH</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

### Bioaccumulative potential

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Bioaccumulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-ethylhexyl glycidyl ether</td>
<td>LOW (LogKOW = 2.9709)</td>
</tr>
</tbody>
</table>

### Mobility in soil

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-ethylhexyl glycidyl ether</td>
<td>LOW (KOC = 30.1)</td>
</tr>
</tbody>
</table>

### SECTION 13 DISPOSAL CONSIDERATIONS

#### Waste treatment methods

- Containers may still present a chemical hazard/ danger when empty.
- Return to supplier for reuse/ recycling if possible.
- Otherwise:
  - 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.
- Legislation addressing waste disposal requirements may differ by country, state and/or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.
- A Hierarchy of Controls seems to be common - the user should investigate:
  - Reduction
  - Reuse
  - Recycling
  - Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type.

- 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.
- Recycle containers if possible, or dispose of in an authorised landfill.

### SECTION 14 TRANSPORT INFORMATION

#### Labels Required

- Marine Pollutant
  - HAZCHEM: •3Z

#### Land transport (ADG)

- UN number: 3082
- UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains bisphenol A/ glycidyl ether polymer, high molecular weight)
### Transport hazard class(es)

- Class: 9
- Subrisk: Not Applicable

### Packing group

- III

### Environmental hazard

- Environmentally hazardous

### Special precautions for user

- Special provisions: 274 331 305 375 AU01
- Limited quantity: 5 L

Environmental 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 polymer, high molecular weight)*
- ICAO/IATA Class: 9
- ICAO /IATA Subrisk: Not Applicable
- ERG Code: 9L
- Packing group: III
- Environmental hazard: Environmentally hazardous

### Special precautions for user

- Special provisions: A97 A158 A197
- Cargo Only Packing Instructions: 964
- Cargo Only Maximum Qty / Pack: 450 L
- 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 polymer, high molecular weight)*
- 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 POLYMER, HIGH MOLECULAR WEIGHT(25068-38-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS
  - Australia Hazardous Substances Information System - Consolidated Lists
  - Australia Inventory of Chemical Substances (AICS)

- BISPHENOL F/ EPICHLOROHYDRIN COPOLYMER(55492-52-9) IS FOUND ON THE FOLLOWING REGULATORY LISTS
  - Australia Inventory of Chemical Substances (AICS)

- 2-ETHYLHEXYL GLYCIDYL ETHER(2461-15-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS
  - Australia Inventory of Chemical Substances (AICS)

<table>
<thead>
<tr>
<th>National Inventory</th>
<th>Status</th>
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<tbody>
<tr>
<td>Australia - AICS</td>
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<tr>
<td>Canada - DSL</td>
<td>Y</td>
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<tr>
<td>Canada - NDSL</td>
<td>N (bisphenol A/ diglycidyl ether polymer, high molecular weight; bisphenol F/ epichlorohydrin copolymer; 2-ethylhexyl glycidyl ether)</td>
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</table>
SECTION 16 OTHER INFORMATION

Ingredients with multiple cas numbers

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS No</th>
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<tbody>
<tr>
<td>bisphenol F/epichlorohydin copolymer</td>
<td>55492-52-9, 58421-55-9, 9003-36-5</td>
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</tbody>
</table>

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
BGF: BioConcentration Factors
BEI: Biological Exposure Index

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TEL (+61 3) 9572 4700.