

# Material Safety Data Sheet



## 1 . Identification of the material and supplier

### Names

**Product name** : Sikadur-31/41 Part A  
**ADG** : Environmentally hazardous substance, liquid, n.o.s.

### Supplier

**Supplier/Manufacturer** : Sika (NZ) Ltd.  
PO Box 19 192  
Avondale  
Auckland 1746

85-91 Patiki Road  
Avondale  
Auckland 1026

www.sika.co.nz

**Telephone no.** : +64 9 820 2900

**Fax no.** : +64 9 828 4091

**Emergency telephone number** : 0800 734 607

**Use of the substance/preparation** : Chemical product for construction and industry

## 2 . Hazards identification

**Classification** : Xi; R36/38 ERMA NZ Approval Code HSR002670  
R43 HSNO Hazard Classification 6.4A, 6.3A, 6.5B, 9.1B  
N; R51/53

**Risk phrases** : R36/38- Irritating to eyes and skin.  
R43- May cause sensitisation by skin contact.  
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety phrases** : S24- Avoid contact with skin.  
S37- Wear suitable gloves.  
S61- Avoid release to the environment. Refer to special instructions/safety data sheet.

**Statement of hazardous/dangerous nature** : HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

## 3 . Composition/information on ingredients

**Mixture** : Yes.

|   |            |          |
|---|------------|----------|
| reaction product: bisphenol A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700) | 25068-38-6 | 10 - <30 |
| oxirane, mono[(C12-14-alkyloxy)methyl]derivs  | 68609-97-2 | 1 - <10  |
| nonylphenol   | 25154-52-3 | 1 - <10  |

Other ingredients, determined not to be hazardous according to NOHSC criteria, and not dangerous according to the ADG Code, make up the product concentration to 100%.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

## 4 . First-aid measures

### First-aid measures

**Inhalation** : Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

## 4 . First-aid measures

|                                   |  |
|-----------------------------------|--|
| <b>Ingestion</b>                  | : Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |
| <b>Skin contact</b>               | : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.  |
| <b>Eye contact</b>                | : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.  |
| <b>Protection of first-aiders</b> | : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.  |
| <b>Notes to physician</b>         | : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.   |

## 5 . Fire-fighting measures

### Extinguishing media

|   |   |
|---|---|
| <b>Suitable</b>                                       | : Use an extinguishing agent suitable for the surrounding fire.   |
| <b>Not suitable</b>                                   | : None known.   |
| <b>Special exposure hazards</b>                       | : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. This material is toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.<br><br>In a fire or if heated, a pressure increase will occur and the container may burst. |
| <b>Special protective equipment for fire-fighters</b> | : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.   |
| <b>Hazardous combustion products</b>                  | : Decomposition products may include the following materials:<br>carbon dioxide<br>carbon monoxide<br>halogenated compounds<br>metal oxide/oxides   |
| <b>Special protective equipment for fire-fighters</b> | : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.   |
| <b>Hazchem code</b>                                   | : 3Z  |

## 6 . Accidental release measures

|                                  |   |
|----------------------------------|---|
| <b>Personal precautions</b>      | : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8). |
| <b>Environmental precautions</b> | : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.  |

## 6 . Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## 7 . Handling and storage

- Handling** : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. Refer to special instructions/safety data sheet. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

## 8 . Exposure controls/personal protection

- Occupational exposure limits** : **No exposure standard allocated.**
- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
- Exposure controls**
- Engineering measures** : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## 8 . Exposure controls/personal protection

- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## 9 . Physical and chemical properties

- Physical state** : Liquid. [Paste.]
- Colour** : White.
- Odour** : Characteristic.
- Vapour pressure** : 0.01 kPa (0.075 mm Hg)
- Density** : 1.7 g/cm<sup>3</sup> [20°C (68°F)]
- Flash point** : Closed cup: 170°C (338°F)
- pH** : 6 [Conc. (% w/w): 50%]
- Solubility** : Insoluble in the following materials: cold water.

## 10 . Stability and reactivity

- Stability** : The product is stable.
- Conditions to avoid** : Avoid release to the environment. Refer to special instructions/safety data sheet.
- Materials to avoid** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11 . Toxicological information

### Potential acute health effects

- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : Irritating to mouth, throat and stomach.
- Skin contact** : Irritating to skin. May cause sensitisation by skin contact.
- Eye contact** : Irritating to eyes.

### Acute toxicity

| Product/ingredient name                        | Result          | Species | Dose        | Exposure |
|--|-----------------|---------|-------------|----------|
| Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. | LD50 Oral       | Rat     | 17100 mg/kg | -        |
| nonylphenol                                    | LD50 Dermal     | Rabbit  | 2140 mg/kg  | -        |
|  | LD50 Dermal     | Rabbit  | 2140 uL/kg  | -        |
|  | LD50 Oral       | Mouse   | 75.63 mL/kg | -        |
|  | LD50 Oral       | Mouse   | 1231 mg/kg  | -        |
|  | LD50 Oral       | Rat     | 580 mg/kg   | -        |
|  | TDLo            | Rat     | 60 mg/kg    | -        |
|  | Intraperitoneal |         |             |          |

- Conclusion/Summary** : Not available.

### Potential chronic health effects

#### Chronic toxicity

- Conclusion/Summary** : Not available.

#### Carcinogenicity

- Conclusion/Summary** : Not available.

#### Mutagenicity

- Conclusion/Summary** : Not available.

#### Teratogenicity

- Conclusion/Summary** : Not available.

#### Reproductive toxicity

- Conclusion/Summary** : Not available.

- Chronic effects** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

## 11 . Toxicological information

|                              |   |
|------------------------------|---|
| <b>Carcinogenicity</b>       | : No known significant effects or critical hazards. |
| <b>Mutagenicity</b>          | : No known significant effects or critical hazards. |
| <b>Teratogenicity</b>        | : No known significant effects or critical hazards. |
| <b>Developmental effects</b> | : No known significant effects or critical hazards. |
| <b>Fertility effects</b>     | : No known significant effects or critical hazards. |

### Over-exposure signs/symptoms

|                      |  |
|----------------------|--|
| <b>Inhalation</b>    | : No specific data.  |
| <b>Ingestion</b>     | : No specific data.  |
| <b>Skin</b>          | : Adverse symptoms may include the following:<br>irritation<br>redness   |
| <b>Eyes</b>          | : Adverse symptoms may include the following:<br>irritation<br>watering<br>redness   |
| <b>Target organs</b> | : Contains material which may cause damage to the following organs: lungs, upper respiratory tract, skin, eye, lens or cornea. |

## 12 . Ecological information

|                              |   |
|------------------------------|---|
| <b>Environmental effects</b> | : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
|------------------------------|---|

### Aquatic ecotoxicity

| Product/ingredient name | Test | Result                                 | Species  | Exposure |
|-------------------------|------|--|--|----------|
| nonylphenol             | -    | Acute EC50 203 to 231 ug/L Fresh water | Fish - Bluegill - Lepomis macrochirus - Juvenile (Fledgling, Hatchling, Weanling) - 1 years - 23 mm - 294 mg | 96 hours |
|                         | -    | Acute EC50 190 to 210 ug/L Fresh water | Daphnia - Water flea - Daphnia magna - 24 hours  | 48 hours |
|                         | -    | Acute EC50 109 to 118 ug/L Fresh water | Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss - Fingerling - 27.2 mm - 241 mg                  | 96 hours |
|                         | -    | Acute EC50 104 to 124 ug/L Fresh water | Daphnia - Water flea - Daphnia magna - Neonate - 24 hours  | 48 hours |
|                         | -    | Acute EC50 96 ug/L Fresh water         | Fish - Fathead minnow - Pimephales promelas - FRY - 17.1 mm - 81.6 mg  | 96 hours |
|                         | -    | Acute LC50 900 ug/L Marine water       | Fish - Atlantic salmon - Salmo salar - Juvenile (Fledgling, Hatchling, Weanling) - 4 g                       | 96 hours |
|                         | -    | Acute LC50 221 to 236 ug/L Fresh water | Fish - Rainbow trout, donaldson trout - Oncorhynchus   | 96 hours |

## 12 . Ecological information

|   |  |  |
|---|--|--|
| - | Acute LC50 209 to 238 ug/L Fresh water | mykiss - Fingerling - 27.2 mm - 241 mg<br>Fish - Bluegill - 96 hours<br>Lepomis macrochirus - Juvenile (Fledgling, Hatchling, Weanling) - 1 years - 23 mm - 294 mg |
| - | Acute LC50 135 to 187 ug/L Fresh water | Fish - Fathead minnow - Pimephales promelas - 31 to 35 days - 220 mg   |
| - | Acute LC50 128 to 141 ug/L Fresh water | Fish - Fathead minnow - Pimephales promelas - FRY - 17.1 mm - 81.6 mg  |

**Conclusion/Summary** : Not available.

### Other ecological information

#### Biodegradability

**Conclusion/Summary** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## 13 . Disposal considerations

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## 14 . Transport information

### ADG

UN number : UN3082  
 ADG Class : 9  
 Packing group : III  
 Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.  
 Contains : Epoxide resin  
 Label No. : 9  
 Hazchem code : 3Z

### ADR

UN number : UN3082  
 ADR Class : 9  
 Classification code : M6  
 Packing group : III  
 Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.  
 Contains : Epoxide resin  
 Label No. : 9

### IMDG

## 14 . Transport information

**UN number** : UN3082  
**IMDG Class** : 9  
**Packing group** : III  
**Proper shipping name** : Environmentally hazardous substance, liquid, n.o.s.  
**Contains** : Epoxide resin  
**Emergency schedules (EmS)** : F-A, S-F  
**Marine pollutant** : No.  
**Label no.** : 9

### IATA

**UN number** : UN3082  
**IATA Class** : 9  
**Packing group** : III  
**Proper shipping name** : Environmentally hazardous substance, liquid, n.o.s.  
**Contains** : Epoxide resin  
**Label no.** : 9

## 15 . Regulatory information

### Standard for the Uniform Scheduling of Drugs and Poisons

Not regulated.

### Control of Scheduled Carcinogenic Substances

#### Ingredient name

No listed substance

#### Schedule

**Australia inventory (AICS)** : All components are listed or exempted.

**EU Classification** : Xi; R36/38  
 R43  
 N; R51/53

## 16 . Other information

**Person who prepared the MSDS** : Validated by Hunter on 27.09.2010.

**Date of previous issue** : 27.09.2010.

☑ Indicates information that has changed from previously issued version.

### Disclaimer

*Material Safety Data Sheets are updated frequently. Please ensure that you have a current copy. MSDS may be obtained from the following website: [www.sika.co.nz](http://www.sika.co.nz)*

*The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.*