SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
   Trade name : Sikadur®-33 (A)

1.2 Relevant identified uses of the substance or mixture and uses advised against
   Product use : Adhesive

1.3 Details of the supplier of the safety data sheet
   Company : Sika Limited
              Watchmead
              Welwyn Garden City
              Hertfordshire AL7 1BQ
              United Kingdom
   Telephone : +44 (0)1707 394444

1.4 Emergency telephone number
   Emergency telephone number : +44 (0)1707 363899 (available during office hours)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
   Type of product : Mixture
   Classification (REGULATION (EC) No 1272/2008)
   Skin irritation, Category 2 H315: Causes skin irritation.
   Serious eye damage, Category 1 H318: Causes serious eye damage.
   Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.
   Chronic aquatic toxicity, Category 2 H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements
   Labelling (REGULATION (EC) No 1272/2008)
   Hazard pictograms :
   Signal word : Danger
**SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006

**Sikadur®-33 (A)**

<table>
<thead>
<tr>
<th>Hazard statements</th>
<th>H315</th>
<th>Causes skin irritation.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H317</td>
<td>May cause an allergic skin reaction.</td>
</tr>
<tr>
<td></td>
<td>H318</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td></td>
<td>H411</td>
<td>Toxic to aquatic life with long lasting effects.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Precautionary statements</th>
<th>Prevention:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P261: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.</td>
</tr>
<tr>
<td></td>
<td>P273: Avoid release to the environment.</td>
</tr>
<tr>
<td></td>
<td>P280: Wear protective gloves/ eye protection/ face protection.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Response:</th>
</tr>
</thead>
<tbody>
<tr>
<td>P305 + P351 + P338 + P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.</td>
</tr>
<tr>
<td>P333 + P313: If skin irritation or rash occurs: Get medical advice/ attention.</td>
</tr>
<tr>
<td>P362 + P364: Take off contaminated clothing and wash it before reuse.</td>
</tr>
</tbody>
</table>

**Hazardous components which must be listed on the label:**

- **500-033-5** reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular weight <= 700)
- **266-043-4** Cement (chromium reduced)
- **74398-71-3** Aliphatic glycidyl ether
- **500-006-8** reaction product: bisphenol F-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)
- **271-846-8** oxirane, mon[(C12-14-alkyloxy)methyl]deriv

**Additional Labelling:**

EUH205 Contains epoxy constituents. May produce an allergic reaction.

**2.3 Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**SECTION 3: Composition/information on ingredients**

**3.2 Mixtures**

**Hazardous components**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Classification (REGULATION (EC) No 1272/2008)</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular weight &lt;= 700)</td>
<td>Eye Irrit.2; H319 Skin Irrit.2; H315 Skin Sens.1; H317</td>
<td>&gt;= 25 - &lt; 40</td>
</tr>
<tr>
<td>CAS Number</td>
<td>Chemical Name</td>
<td>H-Statements</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>500-033-5</td>
<td>Aliphatic glycidyl ether</td>
<td>Skin Sens.1; H317</td>
</tr>
<tr>
<td>65997-15-1</td>
<td>Cement (chromium reduced)</td>
<td>Skin Irrit.2; H315; Eye Dam.1; H318; STOT SE3; H335</td>
</tr>
<tr>
<td>74398-71-3</td>
<td>Reaction product: bisphenol F-(epichlorhydrin) epoxy resin (number average molecular weight &lt;= 700)</td>
<td>Skin Irrit.2; H315; Skin Sens.1; H317; Aquatic Chronic2; H412</td>
</tr>
<tr>
<td>38640-62-9</td>
<td>Bis(isopropyl)napthalene</td>
<td>Asp. Tox.1; H304; Aquatic Chronic1; H410</td>
</tr>
<tr>
<td>68609-97-2</td>
<td>Oxirane, mono[(C12-14-alkyloxy)methyl]derivs</td>
<td>Skin Irrit.2; H315; Skin Sens.1; H317</td>
</tr>
</tbody>
</table>

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

**General advice**
- Move out of dangerous area.
- Consult a physician.
- Show this safety data sheet to the doctor in attendance.

**If inhaled**
- Move to fresh air.
- Consult a physician after significant exposure.

**In case of skin contact**
- Take off contaminated clothing and shoes immediately.
- Wash off with soap and plenty of water.
- If symptoms persist, call a physician.

**In case of eye contact**
- Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
- In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Continue rinsing eyes during transport to hospital.
- Remove contact lenses.
- Keep eye wide open while rinsing.
If swallowed:
- Do not induce vomiting without medical advice.
- Rinse mouth with water.
- Do not give milk or alcoholic beverages.
- Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:
- Allergic reactions
- Excessive lachrymation
- Erythema
- Dermatitis
- See Section 11 for more detailed information on health effects and symptoms.

Risks:
- Irritant effects
- Sensitising effects
- Causes skin irritation.
- May cause an allergic skin reaction.
- Causes serious eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment:
- Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting:
- Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products:
- No hazardous combustion products are known.

5.3 Advice for firefighters

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

Further information:
- Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment.
Deny access to unprotected persons.

6.2 Environmental precautions

Environmental precautions: Do not flush into surface water or sanitary sewer system.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: Do not breathe vapours or spray mist. Avoid exceeding the given occupational exposure limits (see section 8). Do not get in eyes, on skin, or on clothing. For personal protection see section 8. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Smoking, eating and drinking should be prohibited in the application area. Follow standard hygiene measures when handling chemical products.

Advice on protection against fire and explosion: Normal measures for preventive fire protection.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: Keep container tightly closed in a dry and well-ventilated place. Store in accordance with local regulations.
Other data: No decomposition if stored and applied as directed.

7.3 Specific end use(s)
Specific use(s): No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement (chromium reduced)</td>
<td>65997-15-1</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>GB EH40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>4 mg/m³</td>
<td>GB EH40</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

Personal protective equipment

Eye protection: Safety glasses with side-shields conforming to EN166
Eye wash bottle with pure water

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard must be worn at all times when handling chemical products. Reference number EN 374. Follow manufacturer specifications.
Suitable for short time use or protection against splashes:
Butyl rubber/nitrile rubber gloves (0.4 mm),
Contaminated gloves should be removed.
Suitable for permanent exposure:
Viton gloves (0.4 mm),
breakthrough time >30 min.

Skin and body protection: Protective clothing (e.g. Safety shoes acc. to EN ISO 20345, long-sleeved working clothing, long trousers). Rubber aprons and protective boots are additionally recommended for mixing and stirring work.

Respiratory protection: 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.
Organic vapor filter (Type A)
A1: < 1000 ppm; A2: < 5000 ppm; A3: < 10000 ppm
Ensure adequate ventilation. This can be achieved by local
exhaust extraction or by general ventilation. (EN 689 - Methods for determining inhalation exposure). This applies in particular to the mixing / stirring area. In case this is not sufficient to keep the concentrations under the occupational exposure limits then respiration protection measures must be used.

Environmental exposure controls
General advice : Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>paste</td>
</tr>
<tr>
<td>Colour</td>
<td>grey</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 101 °C</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower explosion limit (Vol-%)</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper explosion limit (Vol-%)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>ca. 7</td>
</tr>
<tr>
<td>Melting point/range / Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>&lt; 1,5 hPa</td>
</tr>
<tr>
<td>Density</td>
<td>ca.1.49 g/cm3 at 20 °C</td>
</tr>
</tbody>
</table>
Water solubility : insoluble
Partition coefficient: n-octanol/water : No data available
Viscosity, dynamic : No data available
Viscosity, kinematic : > 20.5 mm²/s at 40 °C
Relative vapour density : No data available
Evaporation rate : No data available

9.2 Other information
No data available

SECTION 10: Stability and reactivity

10.1 Reactivity
No dangerous reaction known under conditions of normal use.

10.2 Chemical stability
The product is chemically stable.

10.3 Possibility of hazardous reactions
Hazardous reactions : Stable under recommended storage conditions.

10.4 Conditions to avoid
Conditions to avoid : No data available

10.5 Incompatible materials
Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
Not classified based on available information.

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

Acute oral toxicity : LD50 Oral (Rat): > 5.000 mg/kg
Acute dermal toxicity: LD50 Dermal (Rabbit): > 20,000 mg/kg

bis(isopropyl)naphthalene:
Acute oral toxicity: LD50 Oral (Rat): > 3,900 mg/kg
Acute inhalation toxicity: LC50 (Rat): > 5,64 mg/l
  Exposure time: 4 h
  Test atmosphere: dust/mist
Acute dermal toxicity: LD50 Dermal (Rat): > 4,500 mg/kg

oxirane, mono[(C12-14-alkyloxy)methyl]derivs:
Acute oral toxicity: LD50 Oral (Rat): > 5,000 mg/kg

Skin corrosion/irritation
Causes skin irritation.

Serious eye damage/eye irritation
Causes serious eye damage.

Respiratory or skin sensitisation
Skin sensitisation: May cause an allergic skin reaction.
Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity
Not classified based on available information.

Carcinogenicity
Not classified based on available information.

Reproductive toxicity
Not classified based on available information.

STOT - single exposure
Not classified based on available information.

STOT - repeated exposure
Not classified based on available information.

Aspiration toxicity
Not classified based on available information.

SECTION 12: Ecological information

12.1 Toxicity

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

Toxicity to fish: LC50: 2 mg/l, 96 h, Oncorhynchus mykiss (rainbow trout)
Toxicity to daphnia and other: EC50: 1,8 mg/l, 48 h, Daphnia magna (Water flea)
12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

**Product:**

**Assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

**Product:**

**Additional ecological information**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Toxic to aquatic life with long lasting effects.

**SECTION 13: Disposal considerations**

13.1 Waste treatment methods

**Product**

The generation of waste should be avoided or minimized 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

**European Waste Catalogue**

08 04 09* waste adhesives and sealants containing organic solvents or other dangerous substances

**Contaminated packaging**

15 01 10* packaging containing residues of or contaminated by dangerous substances
SECTION 14: Transport information

**ADR**

| 14.1 UN number | 3082 |
| 14.2 Description of the goods | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin) |

| 14.3 Class | 9 |
| 14.4 Packing group | III |
| Classification Code | M6 |
| Labels | 9 |
| Tunnel restriction code | (-) |

| 14.5 Environmentally hazardous | yes |

**IATA**

| 14.1 UN number | 3082 |
| 14.2 Description of the goods | Environmentally hazardous substance, liquid, n.o.s. (epoxy resin) |

| 14.3 Class | 9 |
| 14.4 Packing group | III |
| Labels | 9 |

| 14.5 Environmentally hazardous | yes |

**MDG**

| 14.1 UN number | 3082 |
| 14.2 Description of the goods | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin) |

| 14.3 Class | 9 |
| 14.4 Packing group | III |
| Labels | 9 |
| EmS Number 1 | F-A |
| EmS Number 2 | S-F |

| 14.5 Marine pollutant | yes |

**14.6 Special precautions for user**

No data available

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Prohibition/Restriction
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII): Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59): None of the components are listed (=> 0.1 %).

REACH - List of substances subject to authorisation (Annex XIV): Not applicable

REACH Information: All substances contained in our Products are - preregistered or registered by our upstream suppliers, and/or - preregistered or registered by us, and/or - excluded from the regulation, and/or - exempted from the registration.


<table>
<thead>
<tr>
<th>E2</th>
<th>ENVIRONMENTAL HAZARDS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity 1</td>
</tr>
<tr>
<td></td>
<td>200 t</td>
</tr>
</tbody>
</table>

VOC-CH (VOCV): 0.03 %
no VOC duties

VOC-EU (solvent): 0.03 %

If other regulatory information applies that is not already provided elsewhere in the Safety Data Sheet, then it is described in this subsection.

Health, safety and environmental regulation/legislation specific for the substance or mixture:
- Environmental Protection Act 1990 & Subsidiary Regulations
- Health and Safety at Work Act 1974 & Subsidiary Regulations
- Control of Substances Hazardous to Health Regulations (COSHH)
- May be subject to the Control of Major Accident Hazards Regulations (COMAH), and amendments.

Other regulations:
- This product contains cement. Wet cement or mortar may cause alkali burns if in direct and/or prolonged contact with the skin. Wear protective clothing at all times when working with cement based products.

15.2 Chemical safety assessment

This product contains substances for which Chemical Safety Assessments are still required.
SECTION 16: Other information

Full text of H-statements

H304  May be fatal if swallowed and enters airways.
H315  Causes skin irritation.
H317  May cause an allergic skin reaction.
H318  Causes serious eye damage.
H319  Causes serious eye irritation.
H335  May cause respiratory irritation.
H410  Very toxic to aquatic life with long lasting effects.
H411  Toxic to aquatic life with long lasting effects.
H412  Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Aquatic Chronic  Chronic aquatic toxicity
Asp. Tox.  Aspiration hazard
Eye Dam.  Serious eye damage
Eye Irrit.  Eye irritation
Skin Irrit.  Skin irritation
Skin Sens.  Skin sensitisation
STOT SE  Specific target organ toxicity - single exposure
ADR  Accord européen relatif au transport international des marchandises
Dangereuses par Route
CAS  Chemical Abstracts Service
DNEL  Derived no-effect level
EC50  Half maximal effective concentration
GHS  Globally Harmonized System
IATA  International Air Transport Association
IMDG  International Maritime Code for Dangerous Goods
LD50  Median lethal dosage (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)
LC50  Median lethal concentration (concentrations of the chemical in air that kills 50% of the test animals during the observation period)
MARPOL  International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978
OEL  Occupational Exposure Limit
PBT  Persistent, bioaccumulative and toxic
PNEC  Predicted no effect concentration
SVHC  Substances of Very High Concern
vPvB  Very persistent and very bioaccumulative

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.

Changes as compared to previous version!