SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)

Sikadur®-31 SBA S-02 Part A

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

1.1 Product identifier

Product name : Sikadur®-31 SBA S-02 Part A

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

1.3 Details of the supplier of the safety data sheet

Manufacturer/Distributor : Sika Limited
Watchmead Welwyn Garden City
Hertfordshire. AL7 1BQ
United Kingdom

Telephone no. : 01707 394444
Fax no. : 01707 329129
e-mail address of person responsible for this SDS : EHS@uk.sika.com
Emergency telephone number : +44 (0)1707 363899 (available during office hours).

1.4 Emergency telephone number

Supplier
Telephone number : +44 (0)1707 363899 (available during office hours).

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Xi; R36/38
R43
R52/53

Human health hazards : Irritating to eyes and skin. May cause sensitisation by skin contact.

Environmental hazards : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

See Section 16 for the full text of the R phrases or H statements declared above.
See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard symbol or symbols :

Indication of danger : Irritant

Risk phrases : R36/38- Irritating to eyes and skin.
R43- May cause sensitisation by skin contact.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases : S24- Avoid contact with skin.
S37- Wear suitable gloves.

Date of issue : 09.07.2012.
MSDS no. : 19541-13
1/12
SECTION 2: Hazards identification

Hazardous ingredients: reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)
1,4-bis(2,3-epoxypropoxy)butane

Supplemental label elements: Contains epoxy constituents. See information supplied by the manufacturer.

2.3 Other hazards
Other hazards which do not result in classification: Not available.

SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>%</th>
<th>Classification</th>
<th>Regulation (EC) No. 1272/2008 [CLP]</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>reaction product: bisphenol-A-(epichlorhydrin); epoxy resin</td>
<td>&gt;= 5 - &lt; 25</td>
<td>Xi; R36/38</td>
<td>Skin Irrit. 2, H315</td>
<td>[1]</td>
</tr>
<tr>
<td>RRN: 01-2119456619-26</td>
<td></td>
<td>R43</td>
<td>Eye Irrit. 2, H319</td>
<td></td>
</tr>
<tr>
<td>EC: 500-033-5</td>
<td></td>
<td>N; R51/53</td>
<td>Skin Sens. 1, H317</td>
<td></td>
</tr>
<tr>
<td>CAS: 25068-38-6</td>
<td></td>
<td></td>
<td>Aquatic Chronic 2, H411</td>
<td></td>
</tr>
<tr>
<td>Index: 603-074-00-8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,4-bis(2,3-epoxypropoxy)butane</td>
<td>&gt;= 1 - &lt; 20</td>
<td>Xn; R20/21; Xi; R36/38</td>
<td>Acute Tox. 4, H312</td>
<td>[1]</td>
</tr>
<tr>
<td>EC: 219-371-7</td>
<td></td>
<td>R43</td>
<td>Acute Tox. 4, H332</td>
<td></td>
</tr>
<tr>
<td>CAS: 2425-79-8</td>
<td></td>
<td>R52/53</td>
<td>Skin Irrit. 2, H315</td>
<td></td>
</tr>
<tr>
<td>Index: 603-072-00-7</td>
<td></td>
<td></td>
<td>Eye Irrit. 2, H319</td>
<td></td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), heavy arom.</td>
<td>&gt;= 0.25 - &lt; 2.5</td>
<td>Xn; R65</td>
<td>Acute Tox. 4, H302</td>
<td>[1]</td>
</tr>
<tr>
<td>RRN: 01-2119451151-53</td>
<td></td>
<td>R66, R67</td>
<td>Carc. 2, H351</td>
<td>[1][2]</td>
</tr>
<tr>
<td>EC: 926-273-4</td>
<td></td>
<td>N; R51/53</td>
<td>Aquatic Chronic 2, H411</td>
<td></td>
</tr>
<tr>
<td>naphthalene</td>
<td>&gt;= 0.1 - &lt; 0.25</td>
<td>Xn; R22</td>
<td>Acute Tox. 4, H302</td>
<td></td>
</tr>
<tr>
<td>EC: 202-049-5</td>
<td></td>
<td>N; R50/53</td>
<td>Carc. 2, H351</td>
<td></td>
</tr>
<tr>
<td>CAS: 91-20-3</td>
<td></td>
<td></td>
<td>Aquatic Acute 1, H400</td>
<td></td>
</tr>
<tr>
<td>Index: 601-052-00-2</td>
<td></td>
<td>See section 16 for the full text of the R-phrases declared above</td>
<td>Aquatic Chronic 1, H410</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>See Section 16 for the full text of the H statements declared above.</td>
<td></td>
</tr>
</tbody>
</table>

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, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Type
[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.
SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact: 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.

Inhalation: Get medical attention if adverse health effects persist or are severe.

Skin contact: 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 if symptoms occur.

Ingestion: Do not induce vomiting unless directed to do so by medical personnel. Maintain an open airway. Seek immediate medical attention.

Protection of first-aiders: 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.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact: Irritating to eyes.

Inhalation: No known significant effects or critical hazards.

Skin contact: Irritating to skin. May cause sensitisation by skin contact.

Ingestion: Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:
irritation
watering
redness

Inhalation: No specific data.

Skin contact: Adverse symptoms may include the following:
irritation
redness

Ingestion: No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media: None known.

5.2 Special hazards arising from the substance or mixture

Hazard from the substance or mixture: In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products: Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
halogenated compounds
metal oxide/oxides

5.3 Advice for firefighters

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**SECTION 5: Firefighting measures**

**Special protective actions for fire-fighters**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. This material is harmful to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Special protective equipment for fire-fighters**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

**SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel**: 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.

**For emergency responders**: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also Section 8 for additional information on hygiene measures.

6.2 Environmental precautions: 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.

6.3 Methods and materials for containment and cleaning up

**Small spill**: Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container.

**Large spill**: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. 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).

6.4 Reference to other sections: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

**SECTION 7: Handling and storage**

7.1 Precautions for safe handling

**Protective measures**: 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. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. 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.

**Advice on general occupational hygiene**: 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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
SECTION 7: Handling and storage

7.2 Conditions for safe storage, including any incompatibilities

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.

7.3 Specific end use(s)

Recommendations: Not available.

Industrial sector specific solutions: Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Exposure limit values</th>
</tr>
</thead>
<tbody>
<tr>
<td>naphthalen</td>
<td>EU OEL (Europe, 12/2009). Notes: list of indicative occupational exposure limit values</td>
</tr>
<tr>
<td></td>
<td>TWA: 50 mg/m³ 8 hour(s).</td>
</tr>
<tr>
<td></td>
<td>TWA: 10 ppm 8 hour(s).</td>
</tr>
</tbody>
</table>

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. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Derived effect levels

No DELs available.

Predicted effect concentrations

No PECs available.

8.2 Exposure controls

Appropriate engineering controls: 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.

Individual protection measures

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.

Eye/face protection: 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, gases or dusts.

Skin protection

Hand protection: 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. Reference number EN 374. Suitable for short time use or protection against splashes: Butyl rubber/nitrile rubber gloves. (0.4 mm), breakthrough time <30 min. Contaminated gloves should be removed. Suitable for permanent exposure: Viton gloves (0.4 mm), breakthrough time >30 min.
SECTION 8: Exposure controls/personal protection

**Body protection**

- 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. Recommended: Use barrier skin cream.

**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.

**SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties

- **Appearance**
  - Physical state: Paste.
  - Colour: White.
  - Odour: Odourless.
  - Odour threshold: Not available.
  - pH: 7.5 [Conc. (% w/w): 50%]
  - Melting point/freezing point: Not available.
  - Initial boiling point and boiling range: Not available.
  - Flash point: Closed cup: >101°C
  - Evaporation rate: Not available.
  - Flammability (solid, gas): Not available.
  - Burning time: Not applicable.
  - Burning rate: Not applicable.
  - Upper/lower flammability or explosive limits: Not applicable.
  - Vapour pressure: <0 kPa (<0.007 mm Hg)
  - Vapour density: Not available.
  - Density: ~2 g/cm³ [20°C (68°F)]
  - Relative density: Not available.
  - Solubility(ies): Insoluble in the following materials: water
  - Partition coefficient: n-octanol/water: Not available.
  - Auto-ignition temperature: Not applicable.
  - Decomposition temperature: Not available.
  - Viscosity: Not available.
  - Explosive properties: Not available.
  - Oxidising properties: Not available.

9.2 Other information

- No additional information.

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SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : No specific data.

10.5 Incompatible materials : No specific data.

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>reaction product: bisphenol A-(epichlorhydrin) epoxy resin (number average molecular weight &lt;= 700)</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>&gt;20000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>1,4-bis(2,3-epoxypropoxy)butane</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>&gt;5000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>1130 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>naphthalene</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>1134 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rat</td>
<td>&gt;2500 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>&gt;490 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Conclusion/Summary: Not available.

Irritation/Corrosion: Not available.

Sensitisation: Not available.

Mutagenicity: Not available.

Carcinogenicity: Not available.

Reproductive toxicity: Not available.

Teratogenicity: Not available.

Information on the likely routes of exposure: Not available.

Potential acute health effects

Eye contact : Irritating to eyes.
Inhalation : May cause irritation.
Skin contact : Irritating to skin. May cause sensitisation by skin contact.
Ingestion : Irritating to mouth, throat and stomach.

 Symptoms related to the physical, chemical and toxicological characteristics
SECTION 11: Toxicological information

Eye contact: Adverse symptoms may include the following:
- irritation
- watering
- redness

Inhalation: No specific data.

Skin contact: Adverse symptoms may include the following:
- irritation
- redness

Ingestion: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

**Short term exposure**
- **Potential immediate effects**: Not available.
- **Potential delayed effects**: Not available.

**Long term exposure**
- **Potential immediate effects**: Not available.
- **Potential delayed effects**: Not available.

**Potential chronic health effects**
Not available.

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

**Carcinogenicity**
- No known significant effects or critical hazards.

**Mutagenicity**
- No known significant effects or critical hazards.

**Teratogenicity**
- Not available.

**Developmental effects**
- No known significant effects or critical hazards.

**Fertility effects**
- No known significant effects or critical hazards.

**Other information**
Not available.

SECTION 12: Ecological information

12.1 Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>naphthalene</td>
<td>Acute EC50 1.96 mg/L Marine water</td>
<td>Daphnia</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 0.51 mg/L Marine water</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

**Conclusion/Summary**: Not available.

12.2 Persistence and degradability

**Conclusion/Summary**: Not available.

12.3 Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,4-bis(2,3-epoxypropoxy)butane naphthalene</td>
<td>-0.15</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>naphthalene</td>
<td>3.3</td>
<td>-</td>
<td>high</td>
</tr>
</tbody>
</table>

12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)**: Not available.
SECTION 12: Ecological information

Mobility : Not available.

12.5 Results of PBT and vPvB assessment
PBT : Not applicable.
vPvB : Not applicable.

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Product
Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. 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.

Hazardous waste : Yes.

European waste catalogue (EWC)

<table>
<thead>
<tr>
<th>Waste code</th>
<th>Waste designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>08 04 09*</td>
<td>waste adhesives and sealants containing organic solvents or other dangerous substances</td>
</tr>
</tbody>
</table>

Packaging : Completely emptied packaging or practically empty packaging containing dried/cured residues, once relieved of all pressure can be disposed of as non-hazardous waste.

- Packaging may still contain hazardous residues and disposal should undertaken by a licensed waste contractor.
- Any disposal practice must be in compliance with local and national laws and regulations.

European waste catalogue (EWC) (Packaging) : packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

<table>
<thead>
<tr>
<th>14.1 UN number</th>
<th>ADR/RID - ADN/ADNR</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
</table>

14.2 UN proper shipping name

14.3 Transport hazard class(es) - - -

14.4 Packing group - - -

14.5 Environmental hazards
No No No

14.6 Special precautions for user
Not available. Not available. Not available.

Additional information - - -
SECTION 14: Transport information

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)
Annex XIV - List of substances subject to authorisation
Substances of very high concern
None of the components are listed.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles
VOC content (EU): VOC (w/w): 0.12%

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

Europe inventory: All components are listed or exempted.

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Carcinogenic effects</th>
<th>Mutagenic effects</th>
<th>Developmental effects</th>
<th>Fertility effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>naphthalene</td>
<td>Carc. Cat. 3; R40</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

References:
- Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (CHIP 4)
- Control of Substances Hazardous to Health Regulations 2002 (COSHH) (as amended)
- Health & Safety at Work Act 1974
- The Environmental Protection (Duty of Care) Regulations 1991
- Hazardous waste regulations 2005
- The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2007

Guidance Publications:
- Approved Code of Practice - Management of Health and Safety at Work, HSE
- General Approved Code of Practice to COSHH Regulations, HSE.
- EH40, Workplace Exposure Limits, HSE (as updated).
- HS(G) 53, Respiratory Protection Equipment - a Practical Guide for Users, HSE.

15.2 Chemical Safety Assessment: This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Date of issue: 09.07.2012.
MSDS no.: 19541-13
SECTION 16: Other information

Abbreviations and acronyms:
- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number

Full text of abbreviated H statements:
- H302: Harmful if swallowed.
- H304: May be fatal if swallowed and enters airways.
- H312: Harmful in contact with skin.
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H319: Causes serious eye irritation.
- H332: Harmful if inhaled.
- H336i: May cause drowsiness or dizziness.
- H351: Suspected of causing cancer.
- H400: Very toxic to aquatic life.
- 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 classifications [CLP/GHS]:
- Acute Tox. 4, H302: ACUTE TOXICITY: ORAL - Category 4
- Acute Tox. 4, H312: ACUTE TOXICITY: SKIN - Category 4
- Acute Tox. 4, H332: ACUTE TOXICITY: INHALATION - Category 4
- Aquatic Acute 1, H400: AQUATIC TOXICITY (ACUTE) - Category 1
- Aquatic Chronic 1, H410: AQUATIC TOXICITY (CHRONIC) - Category 1
- Aquatic Chronic 2, H411: AQUATIC TOXICITY (CHRONIC) - Category 2
- Aquatic Chronic 3, H412: AQUATIC TOXICITY (CHRONIC) - Category 3
- Asp. Tox. 1, H304: ASPIRATION HAZARD - Category 1
- Carc. 2, H351: CARCINOGENICITY - Category 2
- Eye Irrit. 2, H319: SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
- Skin Irrit. 2, H315: SKIN CORROSION/IRRITATION - Category 2
- Skin Sens. 1, H317: SKIN SENSITIZATION - Category 1
- STOT SE 3, H336i: SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): INHALATION [Narcotic effects] - Category 3

Full text of abbreviated R phrases:
- R40: Limited evidence of a carcinogenic effect.
- R22: Harmful if swallowed.
- R20/21: Harmful by inhalation and in contact with skin.
- R65: Harmful: may cause lung damage if swallowed.
- R36/38: Irritating to eyes and skin.
- R43: May cause sensitisation by skin contact.
- R66: Repeated exposure may cause skin dryness or cracking.
- R67: Vapours may cause drowsiness and dizziness.
- R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of classifications [DSD/DPD]:
- Carc. Cat. 3 - Carcinogen category 3
- Xn - Hazard
- Xi - Irritant
- N - Dangerous for the environment

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- Date of printing: 09.07.2012.
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Notice to reader:
SECTION 16: Other information

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.