SAFETY DATA SHEET
ALPHA 5300

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

1.1. Product identifier
Product name: ALPHA 5300
Product No.: 5300

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses: STRUCTURAL ADHESIVE

1.3. Details of the supplier of the safety data sheet
Supplier: Alpha Adhesives & Sealants Ltd
Llewellyn Close, Sandy Lane Ind. Est.
Stourport-on-Severn
Worcestershire DY13 9RH
01299 828626
01299 828666
sales@alpha-adhesives.co.uk

1.4. Emergency telephone number
44 (0) 1299 828626 (Available 08.30 to 17.00)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

2.2. Label elements
Contains: METHYL METHACRYLATE
IMPACT MODIFIER
Labelling:
- Irritant
- Highly flammable

Risk Phrases:
- R11: Highly flammable
- R36/37/38: Irritating to eyes, respiratory system 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:
- S9: Keep container in a well-ventilated place.
- S16: Keep away from sources of ignition - No smoking.
- S24/25: Avoid contact with skin and eyes.
- S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S37: Wear suitable gloves.
- S51: Use only in well-ventilated areas.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures
### ALPHA 5300

**METHYL METHACRYLATE**  
60-100%

<table>
<thead>
<tr>
<th>CAS-No.: 80-62-6</th>
<th>EC No.: 201-297-1</th>
<th>Registration Number: 01-2119452498-28</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Classification (EC 1272/2008)</strong></td>
<td><strong>Classification (67/548/EEC)</strong></td>
<td></td>
</tr>
<tr>
<td>Flam. Liq. 2 - H225</td>
<td>F;R11</td>
<td></td>
</tr>
<tr>
<td>Skin Irrit. 2 - H315</td>
<td>R43</td>
<td></td>
</tr>
<tr>
<td>Skin Sens. 1 - H317</td>
<td>Xi;R37/38</td>
<td></td>
</tr>
<tr>
<td>STOT SE 3 - H335</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**METHACRYLIC ACID**  
1-5%

<table>
<thead>
<tr>
<th>CAS-No.: 79-41-4</th>
<th>EC No.: 201-204-4</th>
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<tr>
<td><strong>Classification (EC 1272/2008)</strong></td>
<td><strong>Classification (67/548/EEC)</strong></td>
</tr>
<tr>
<td>Acute Tox. 4 - H302</td>
<td>Xn;R21/22</td>
</tr>
<tr>
<td>Acute Tox. 4 - H312</td>
<td>C;R35</td>
</tr>
<tr>
<td>Skin Corr. 1A - H314</td>
<td>Xi;R37</td>
</tr>
<tr>
<td>STOT SE 3 - H335</td>
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</table>

**PDHP ACCELERATOR**  
1-5%

<table>
<thead>
<tr>
<th>CAS-No.: 34562-31-7</th>
<th>EC No.:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Classification (EC 1272/2008)</strong></td>
<td><strong>Classification (67/548/EEC)</strong></td>
</tr>
<tr>
<td>Not classified.</td>
<td>Xn;R22</td>
</tr>
<tr>
<td></td>
<td>Xi;R38</td>
</tr>
</tbody>
</table>

**IMPACT MODIFIER**  
1-5%

<table>
<thead>
<tr>
<th>CAS-No.:</th>
<th>EC No.:</th>
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</thead>
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<tr>
<td><strong>Classification (EC 1272/2008)</strong></td>
<td><strong>Classification (67/548/EEC)</strong></td>
</tr>
<tr>
<td>Skin Sens. 1 - H317</td>
<td>R43</td>
</tr>
</tbody>
</table>

**PARA TOLUENE SULFONYL CHLORIDE**  
1-5%

<table>
<thead>
<tr>
<th>CAS-No.: 98-59-9</th>
<th>EC No.: 202-684-8</th>
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<tr>
<td><strong>Classification (EC 1272/2008)</strong></td>
<td><strong>Classification (67/548/EEC)</strong></td>
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<tr>
<td>Skin Corr. 1B - H314</td>
<td>C;R34</td>
</tr>
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</table>

**2,6-DI-TERT-BUTYL-P-CRESOL**  
<1%

<table>
<thead>
<tr>
<th>CAS-No.: 128-37-0</th>
<th>EC No.: 204-881-4</th>
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</thead>
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<tr>
<td><strong>Classification (EC 1272/2008)</strong></td>
<td><strong>Classification (67/548/EEC)</strong></td>
</tr>
<tr>
<td>Aquatic Acute 1 - H400</td>
<td>N;R50/53</td>
</tr>
<tr>
<td>Aquatic Chronic 1 - H410</td>
<td></td>
</tr>
</tbody>
</table>

---

2 / 10
## CUMENE HYDROPEROXIDE

<table>
<thead>
<tr>
<th>Classification (EC 1272/2008)</th>
<th>Classification (67/548/EEC)</th>
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<tbody>
<tr>
<td>Org. Perox. E - H242</td>
<td>O;R7</td>
</tr>
<tr>
<td>Acute Tox. 4 - H302</td>
<td>T;R23</td>
</tr>
<tr>
<td>Acute Tox. 4 - H312</td>
<td>C;R34</td>
</tr>
<tr>
<td>Acute Tox. 3 - H331</td>
<td>Xn;R21/22, R48/20/22</td>
</tr>
<tr>
<td>Skin Corr. 1B - H314</td>
<td>N;R51/53</td>
</tr>
<tr>
<td>STOT SE 3 - H335</td>
<td></td>
</tr>
<tr>
<td>STOT RE 2 - H373</td>
<td></td>
</tr>
<tr>
<td>Aquatic Chronic 2 - H411</td>
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</tbody>
</table>

## DEFOMMER

<table>
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<th>Classification (67/548/EEC)</th>
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<tbody>
<tr>
<td>Flam. Liq. 3 - H226</td>
<td>Xi;R38.</td>
</tr>
<tr>
<td>Skin Irrit. 2 - H315</td>
<td>N;R51/53.</td>
</tr>
<tr>
<td>STOT SE 3 - H336</td>
<td>R10,R67.</td>
</tr>
<tr>
<td>Aquatic Chronic 2 - H411</td>
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</tbody>
</table>

## ETHANEDIOL

<table>
<thead>
<tr>
<th>Classification (EC 1272/2008)</th>
<th>Classification (67/548/EEC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 4 - H302</td>
<td>Xn;R22.</td>
</tr>
</tbody>
</table>

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

### Composition Comments

Any substances listed showing % have less than 0.09%

### SECTION 4: FIRST AID MEASURES

#### 4.1. Description of first aid measures

**General information**

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

**Inhalation**

Move the exposed person to fresh air at once. Provide rest, warmth and fresh air. Get medical attention if any discomfort continues.

**Ingestion**

DO NOT INDUCE VOMITING! Rinse mouth thoroughly. Provide rest, warmth and fresh air. Get medical attention immediately!

**Skin contact**

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if irritation persists after washing.

**Eye contact**

Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if any discomfort continues.

#### 4.2. Most important symptoms and effects, both acute and delayed

**Inhalation.**

Vapours may cause drowsiness and dizziness.

**Ingestion**

May cause discomfort if swallowed.
Skin contact
Skin irritation.
Eye contact
May cause temporary eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media
Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.

5.2. Special hazards arising from the substance or mixture
Hazardous combustion products
In case of fire, toxic gases (CO, CO2, NOx) may be formed.
Unusual Fire & Explosion Hazards
HIGHLY FLAMMABLE!
Specific hazards
The product is flammable, and heating may generate vapours which may form explosive vapour/air mixtures.

5.3. Advice for firefighters
Special Fire Fighting Procedures
Avoid breathing fire vapours. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control.
Protective equipment for fire-fighters
Use air-supplied respirator during fire fighting.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
For personal protection, see section 8.

6.2. Environmental precautions
Do not discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up
Clean-up personnel should use respiratory and/or liquid contact protection. Absorb in vermiculite, dry sand or earth and place into containers.

6.4. Reference to other sections
See section 11 for additional information on health hazards.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling
Avoid spilling, skin and eye contact. Keep away from heat, sparks and open flame. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

7.2. Conditions for safe storage, including any incompatibilities
Flammable/combustible - Keep away from oxidisers, heat and flames. Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

7.3. Specific end use(s)
The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters
### ALPHA 5300

<table>
<thead>
<tr>
<th>Name</th>
<th>STD</th>
<th>TWA - 8 Hrs</th>
<th>STEL - 15 Min</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,6-DI-TERT-BUTYL-P-CRESOL</td>
<td>WEL</td>
<td>10 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEFOAMER</td>
<td>WEL</td>
<td>20 ppm</td>
<td>50 ppm</td>
<td></td>
</tr>
<tr>
<td>ETHANEDIOL</td>
<td></td>
<td></td>
<td>40</td>
<td>104</td>
</tr>
<tr>
<td>METHACRYLIC ACID</td>
<td>WEL</td>
<td>20 ppm</td>
<td>72 mg/m³</td>
<td>40 ppm</td>
</tr>
<tr>
<td>METHYL METHACRYLATE</td>
<td>WEL</td>
<td>50 ppm</td>
<td>208 mg/m³</td>
<td>100 ppm</td>
</tr>
<tr>
<td>PARA TOLUENE SULFONYL CHLORIDE</td>
<td></td>
<td></td>
<td></td>
<td>5 mg/m³</td>
</tr>
</tbody>
</table>

WEL = Workplace Exposure Limit.

**Ingredient Comments**

No exposure limits noted for ingredient(s).

**METHYL METHACRYLATE (CAS: 80-62-6)**

<table>
<thead>
<tr>
<th>DNEL</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Inhalation. Long Term Systemic Effects</td>
<td>210 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Inhalation. Long Term Systemic Effects</td>
<td>74.3 mg/m³</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Industry Dermal Long Term Systemic Effects</td>
<td>13.67 mg/kg/day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry Dermal Short Term Systemic Effects</td>
<td>1,500 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Dermal Long Term Systemic Effects</td>
<td>8.2 mg/kg/day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Dermal Short Term Systemic Effects</td>
<td>1,500 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshwater</td>
<td>0.94</td>
<td>mg/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marinewater</td>
<td>0.094</td>
<td>mg/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soil</td>
<td>1.47</td>
<td>mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sediment (Freshwater)</td>
<td>5.74</td>
<td>mg/kg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**METHACRYLIC ACID (CAS: 79-41-4)**

<table>
<thead>
<tr>
<th>DNEL</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Inhalation. Long Term Systemic Effects</td>
<td>89.5 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry Dermal Long Term Systemic Effects</td>
<td>11.4 mg/kg/day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry Freshwater Long Term</td>
<td>0.82 mg/l</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 8.2. Exposure controls

**Protective equipment**

- **Process conditions**
  - Use engineering controls to reduce air contamination to permissible exposure level.
  - Engineering measures
  - Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.
  - Respiratory equipment
    - If ventilation is insufficient, suitable respiratory protection must be provided.
  - Hand protection
    - Use protective gloves.
  - Eye protection
    - Wear approved safety goggles.
  - Other Protection
    - Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.
  - Hygiene measures
    - Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated.
    - Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

**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>Viscous Paste</td>
</tr>
<tr>
<td>Colour</td>
<td>White / off-white.</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic.</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.9-1.0</td>
</tr>
<tr>
<td>Viscosity</td>
<td>500,000-650,000 cps</td>
</tr>
<tr>
<td>Flash point</td>
<td>11.5 CC (Closed cup).</td>
</tr>
</tbody>
</table>

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reaction with: Acids. Strong oxidising agents.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Not applicable.

10.4. Conditions to avoid

Avoid heat. Avoid contact with acids and oxidising substances.

10.5. Incompatible materials

Materials To Avoid

Strong acids. Strong oxidising substances.

10.6. Hazardous decomposition products


SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

General information

Contains small amounts of organic solvents. Extensive use of the product in areas with inadequate ventilation may result in hazardous vapour concentrations.

Inhalation

Irritating to respiratory system.

Ingestion

May cause stomach pain or vomiting.

Skin contact

Irritating to skin. May cause sensitisation by skin contact.

Eye contact

Irritating to eyes.

Toxicological information on ingredients.
ALPHA 5300
METHACRYLIC ACID (CAS: 79-41-4)

Acute toxicity:
Acute Toxicity (Oral LD50)
1320 mg/kg Rat

Acute Toxicity (Dermal LD50)
> 50 mg/kg Rabbit

Acute Toxicity (Inhalation LC50)
7.1 mg/l (vapours) Rat 4 hours

Specific target organ toxicity - repeated exposure:
STOT - Repeated exposure
NOAEL 100 ppmV/6hr/day Inhalation. Rat

2,6-DI-TERT-BUTYL-P-CRESOL (CAS: 128-37-0)

Toxic Dose 1 - LD 50
>2, 930 mg/kg (oral rat)

Toxic Dose 2 - LD 50
>2000 mg/kg (oral-rbt)

PARA TOLUENE SULFONYL CHLORIDE (CAS: 98-59-9)

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity
The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

12.1. Toxicity

Ecological information on ingredients.

METHACRYLIC ACID (CAS: 79-41-4)

Acute Toxicity - Fish
LC50 96 hours 85 mg/l Onchorhynchus mykiss (Rainbow trout)

Acute Toxicity - Aquatic Invertebrates
EC50 48 hours > 130 mg/l Daphnia magna

NOEC 192 hours 53 mg/l Daphnia magna

Acute Toxicity - Aquatic Plants
EC50 72 hours 45 mg/l Selenastrum capricornutum

PARA TOLUENE SULFONYL CHLORIDE (CAS: 98-59-9)

12.2. Persistence and degradability

Degradability
The product is expected to be slowly biodegradable.

Ecological information on ingredients.

METHACRYLIC ACID (CAS: 79-41-4)

Degradability
The product is easily biodegradable.

Biodegradation
Air. Degradation (86%) 28 days
readily biodegradable

12.3. Bioaccumulative potential
Bioaccumulative potential
The product does not contain any substances expected to be bioaccumulating.

Ecological information on ingredients.

**METHACRYLIC ACID (CAS: 79-41-4)**

Bioaccumulative potential
The product is not bioaccumulating.

**12.4. Mobility in soil**

Mobility:
The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

Ecological information on ingredients.

**METHACRYLIC ACID (CAS: 79-41-4)**

Mobility:
The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

**12.5. Results of PBT and vPvB assessment**

Ecological information on ingredients.

**2,6-DI-TERT-BUTYL-P-CRESOL (CAS: 128-37-0)**

This product does not contain any PBT or vPvB substances.

**12.6. Other adverse effects**

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### SECTION 13: DISPOSAL CONSIDERATIONS

**13.1. Waste treatment methods**

Dispose of waste and residues in accordance with local authority requirements.

---

### SECTION 14: TRANSPORT INFORMATION

**14.1. UN number**

- UN No. (ADR/RID/ADN) 1133
- UN No. (IMDG) 1133
- UN No. (ICAO) 1133

**14.2. UN proper shipping name**

Proper Shipping Name: ADHESIVES

**14.3. Transport hazard class(es)**

- ADR/RID/ADN Class 3
- ADR/RID/ADN Class: Class 3: Flammable liquids.
- ADR Label No. 3
- IMDG Class 3
- ICAO Class/Division 3
- Transport Labels

**14.4. Packing group**
14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant No.

14.6. Special precautions for user

EMS F-E, S-D
Emergency Action Code •3YE
Hazard No. (ADR) 33
Tunnel Restriction Code (D/E)

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: REGULATORY INFORMATION

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

Uk Regulatory References
The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.
Statutory Instruments
Approved Code Of Practice
Classification and Labelling of Substances and Preparations Dangerous for Supply.
Guidance Notes
Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG(108).
EU Legislation
Dangerous Substance Directive 67/548/EEC.
National Regulations
Workplace Exposure Limits 2005 (EH40)

15.2. Chemical Safety Assessment

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms used in the safety data sheet
Information Sources
Dangerous Properties of Industrial Materials Report, N.Sax et.al.
Revision Comments
NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision Date NOVEMBER 2012
Revision 6
Risk Phrases In Full

R34 Causes burns.
R35 Causes severe burns.
R10 Flammable.
R22 Harmful if swallowed.
R21/22 Harmful in contact with skin and if swallowed.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R48/20/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
R11 Highly flammable
R36/37/38 Irritating to eyes, respiratory system and skin.
R37/38 Irritating to respiratory system and skin.
R37 Irritating to respiratory system.
R38 Irritating to skin.
R7 May cause fire.
R43 May cause sensitisation by skin contact.
R23 Toxic by inhalation.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67 Vapours may cause drowsiness and dizziness.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard Statements In Full

H319 Causes serious eye irritation.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H412 Harmful to aquatic life with long lasting effects.
H242 Heating may cause a fire.
H225 Highly flammable liquid and vapour.
H317 May cause an allergic skin reaction.
H373 May cause damage to organs <<Organs>> through prolonged or repeated exposure.
H336 May cause drowsiness or dizziness.
H335 May cause respiratory irritation.
H331 Toxic if inhaled.
H411 Toxic to aquatic life with long lasting effects.
H410 Very toxic to aquatic life with long lasting effects.
H400 Very toxic to aquatic life.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.