1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

PRODUCT NAME: CALCOBRITE KIT

PRODUCT CODE: 631150

SUPPLIER: Clin-Tech Limited
Unit G, Perram Works
Merrow Lane
Guildford, Surrey
GU4 7BN
UK

Telephone +44 (0)1483 301902
Fax +44 (0)1483 301907
Email info@clin-tech.co.uk
Website www.clin-tech.co.uk

2. HAZARDS IDENTIFICATION

CLASSIFICATION ACCORDING TO REGULATION (EC) NO 1272/2008 [EU-GHS/CLP]
Skin Corrosion (Category 1A) H314
Acute Toxicity, Oral (Category 4) H302
Chronic Aquatic Toxicity (Category 4) H413

LABELLING ACCORDING TO REGULATION (EC) NO 1272/2008 [EU-GHS/CLP]
DANGER

Hazard statement(s)
H302 Harmful if swallowed
H314 Causes severe skin burns and eye damage
H413 May cause long-lasting harmful effects to aquatic life

Precautionary statement(s)
P280 Wear protective gloves/protective clothing/eye protection/face protection
P301+P313 IF SWALLOWED: Get medical advice / attention
P303+361+353 IF ON SKIN (or hair): Remove / take off immediately all contaminated clothing. Rinse SKIN with water/shower
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

CLASSIFICATION ACCORDING TO EU DIRECTIVES 67/548/EEC AND 1999/45/EEC
C Corrosive R35
Xn Harmful R22
N Dangerous for the environment R53

LABELLING ACCORDING TO EU DIRECTIVE 67/548/EEC

Corrosive Harmful
3. COMPOSITION / INFORMATION ON INGREDIENTS

CalcoBrite Kit contains the following:

<table>
<thead>
<tr>
<th>Reagent</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CalcoBrite Reagent A</strong></td>
<td>3 x 30 mL dropper bottles</td>
</tr>
<tr>
<td>Potassium Hydroxide Solution</td>
<td></td>
</tr>
<tr>
<td><strong>CalcoBrite Reagent B</strong></td>
<td>2 x 30 mL dropper bottles</td>
</tr>
<tr>
<td>CalcoFluor Solution</td>
<td></td>
</tr>
</tbody>
</table>

The SDS for each reagent is presented separately in the following pages.

4. FIRST-AID MEASURES

Refer to kit component SDS.

5. FIRE-FIGHTING MEASURES

Refer to kit component SDS.

6. ACCIDENTAL RELEASE MEASURES

Refer to kit component SDS.

7. HANDLING & STORAGE

**Usage Precautions**
Avoid spilling, skin and eye contact.

**Storage Precautions**
Store in tightly closed original container in a cool, dry well-ventilated place. Ground container and transfer equipment to eliminate static electric sparks. May attack some plastics, rubber and coatings.

**Storage Class**
Chemicals storage.
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Refer to kit component SDS.

9. PHYSICAL AND CHEMICAL PROPERTIES

Refer to kit component SDS.

10. STABILITY AND REACTIVITY

Refer to kit component SDS.

11. TOXICOLOGICAL INFORMATION

Refer to kit component SDS.

12. ECOLOGICAL INFORMATION

Refer to kit component SDS.

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th></th>
<th>UN #</th>
<th>Class</th>
<th>Packing</th>
<th>Proper shipping name</th>
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<tr>
<td>RID / ADR</td>
<td>3316</td>
<td>9</td>
<td>II</td>
<td>Chemical Kit</td>
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<tr>
<td>IATA</td>
<td>3316</td>
<td>9</td>
<td>II</td>
<td>Chemical Kit</td>
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<tr>
<td>IMDG</td>
<td>3316</td>
<td>9</td>
<td>II</td>
<td>Chemical Kit</td>
</tr>
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</table>

SIGNAGE

ENVIRONMENTAL HAZARDS

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<th>IATA</th>
<th>IMDG</th>
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</thead>
<tbody>
<tr>
<td>ENVIRONMENTAL HAZARDS</td>
<td>No</td>
<td>No</td>
<td>No</td>
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</tbody>
</table>

15. REGULATORY INFORMATION

STATUTORY INSTRUMENTS
This MSDS complies with regulation (EC) no. 1907/2006. Workplace Exposure Limits EH40/2011.

16. OTHER INFORMATION

GENERAL INFORMATION
This safety data sheet covers all codes for this product.
**KIT COMPONENTS**

<table>
<thead>
<tr>
<th></th>
<th>ACCORDING TO REG (EC) NO 1272/2008 [EU-GHS/CLP]</th>
<th>ACCORDING TO EU DIRECTIVES 67/548/EEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>CalcoBrite Reagent A</td>
<td>Skin Corr. 1A H314</td>
<td>C; R35</td>
</tr>
<tr>
<td>CalcoBrite Reagent B</td>
<td>Acute Tox. 4, Aquatic Chronic 4 H302 H413</td>
<td>Xn; R22 R53</td>
</tr>
</tbody>
</table>
1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

**PRODUCT NAME**  CALCOBRITE REAGENT A  
Potassium Hydroxide 15% in 10% Glycerol

**PRODUCT CODE**  63115a

**SUPPLIER**  Clin-Tech Limited  
Unit G, Perram Works  
Merrow Lane  
Guildford, Surrey  
GU4 7BN  
UK

**Telephone**  +44 (0)1483 301902  
**Fax**  +44 (0)1483 301907  
**Email**  info@clin-tech.co.uk  
**Website**  www.clin-tech.co.uk

2. HAZARDS IDENTIFICATION

**CLASSIFICATION ACCORDING TO REGULATION (EC) NO 1272/2008 [EU-GHS/CLP]**

Skin Corrosion (Category 1A)  
H314

**LABELLING ACCORDING TO REGULATION (EC) NO 1272/2008 [EU-GHS/CLP]**

**DANGER**

Hazard statement(s)  
H314  Causes severe skin burns and eye damage

Precautionary statement(s)  
P280  Wear protective gloves/protective clothing/eye protection/face protection  
P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting  
P303+361+353 IF ON SKIN (or hair): Remove / take off immediately all contaminated clothing. Rinse SKIN with water/shower  
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

**CLASSIFICATION ACCORDING TO EU DIRECTIVES 67/548/EEC AND 1999/45/EEC**

C  Corrosive  
R35

**LABELLING ACCORDING TO EU DIRECTIVE 67/548/EEC**

Corrosive
Risk Phrases
R35 Causes severe burns

Safety Phrases
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection
S45 In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>EC #</th>
<th>CAS #</th>
<th>Content</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>POTASSIUM HYDROXIDE</td>
<td>215-181-3</td>
<td>1310-58-3</td>
<td>10-20%</td>
<td>Acute Tox. 4, Skin Corr. 1A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>H302 H314</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>C; R22 R35</td>
</tr>
<tr>
<td>GLYCEROL</td>
<td>200-289-5</td>
<td>56-81-5</td>
<td>5-10%</td>
<td></td>
</tr>
</tbody>
</table>

4. FIRST-AID MEASURES

INHALATION
Move the exposed person to fresh air at once. Get medical attention if any discomfort continues. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.

INGESTION
Do not induce vomiting. Never make an unconscious person vomit or drink fluids. Get medical attention immediately. Show the label or this document to the physician.

SKIN CONTACT
Remove contaminated clothes and rinse skin thoroughly with water. If symptoms occur seek medical attention.

EYE CONTACT
Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eyelids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA
Use: Alcohol-resistant foam. Dry chemicals, sand, dolomite etc. Water spray, fog or mist.

PROTECTIVE MEASURES IN FIRE
Self contained breathing apparatus and full protective clothing must be worn in case of fire.
6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
Wear protective clothing as described in Section 8 of this safety data sheet. Evacuate personnel from the affected area.

ENVIRONMENTAL PRECAUTIONS
Do not allow spillage to enter watercourses, drains or sewers. Stop leak if possible without risk.

SPILL CLEAN-UP METHODS
Provide ventilation and confine spill. Do not allow runoff to sewer. Inform Authorities if large amounts are involved. Absorb with vermiculite, dry sand or earth. Shovel up residue and collect for authorised disposal (see section 13). Flush area with plenty of water.

7. HANDLING & STORAGE

USAGE PRECAUTIONS
Avoid spilling, skin and eye contact.

STORAGE PRECAUTIONS
Store in tightly closed original container in a cool, dry well-ventilated place. Ground container and transfer equipment to eliminate static electric sparks. May attack some plastics, rubber and coatings.

STORAGE CLASS
Chemicals storage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING MEASURES
Provide adequate general and local exhaust ventilation. Provide explosion-proof ventilation for high concentrations.

PROTECTIVE EQUIPMENT

HAND PROTECTION
Use protective gloves made of: Butyl rubber (immersion protection) or Nitrile rubber (splash protection). The most suitable glove should be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

EYE PROTECTION
Wear approved, tight-fitting safety glasses where splashing is probable.
RESPIRATORY EQUIPMENT
Self-contained breathing apparatus where high vapour levels are likely.

OTHER PROTECTION
Provide eyewash station.

HYGIENE MEASURES
DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>APPEARANCE</th>
<th>Colourless Liquid</th>
</tr>
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<tbody>
<tr>
<td>ODOUR</td>
<td>None</td>
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<tr>
<td>(SOLUBILITY) / MISCIBLE WITH:</td>
<td>Water; Ethanol; Ether; Benzene; Organic solvents</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY</td>
<td>1.05 @ 20 °C</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

STABILITY
Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID
Extremes of temperature, direct sunlight.

INCOMPATIBLE MATERIALS
Strong oxidizers, Acids, Reducing agents, Alkali metals.

HAZARDOUS DECOMPOSITION PRODUCTS
During fire, toxic gases (CO, CO₂) are formed.

11. TOXICOLOGICAL INFORMATION

INHALATION
May be harmful by inhalation. May cause respiratory tract irritation.

INGESTION
May be harmful if swallowed.

SKIN CONTACT
Causes severe skin burns. May be harmful by absorption through the skin.

EYE CONTACT
Causes severe eye burns.
12. ECOLOGICAL INFORMATION

ECOTOXICITY
Not regarded as dangerous for the environment.

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>UN #</th>
<th>Class</th>
<th>Packing</th>
<th>Proper shipping name</th>
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<tbody>
<tr>
<td>RID / ADR</td>
<td>1814</td>
<td>8</td>
<td>II Potassium Hydroxide Solution</td>
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<tr>
<td>IATA</td>
<td>1814</td>
<td>8</td>
<td>II Potassium Hydroxide Solution</td>
</tr>
<tr>
<td>IMDG</td>
<td>1814</td>
<td>8</td>
<td>II Potassium Hydroxide Solution</td>
</tr>
</tbody>
</table>

SIGNAGE

ENVIRONMENTAL HAZARDS

| RID / ADR | No    |
| IATA      | No    |
| IMDG      | No    |

15. REGULATORY INFORMATION

STATUTORY INSTRUMENTS
This MSDS complies with regulation (EC) no. 1907/2006.
Workplace Exposure Limits EH40/2011.

16. OTHER INFORMATION

GENERAL INFORMATION
This safety data sheet covers all codes for this product.

REVISION INFORMATION

Revision No.          03
Revision Date         04/2013
Comments              GHS regulations incorporated
Replaces Document Generated 02/2009

HAZARD & RISK PHRASES IN FULL

H302              Harmful if swallowed
H314              Causes severe skin burns and eye damage
R22               Harmful if swallowed.
R35               Causes severe burns
1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

PRODUCT NAME: CALCOBRITE REAGENT B
CalcoFluor (M2R Fluorescent Brightener) Solution

PRODUCT CODE: 63115b

SUPPLIER: Clin-Tech Limited
Unit G, Perram Works
Merrow Lane
Guildford, Surrey
GU4 7BN
UK

Telephone +44 (0)1483 301902
Fax +44 (0)1483 301907
Email info@clin-tech.co.uk
Website www.clin-tech.co.uk

2. HAZARDS IDENTIFICATION

CLASSIFICATION ACCORDING TO REGULATION (EC) NO 1272/2008 [EU-GHS/CLP]

Acute Toxicity, Oral (Category 4) H302
Chronic Aquatic Toxicity (Category 4) H413

LABELLING ACCORDING TO REGULATION (EC) NO 1272/2008 [EU-GHS/CLP]

WARNING

Hazard statement(s)
H302 Harmful if swallowed
H413 May cause long-lasting harmful effects to aquatic life

Precautionary statement(s)
P301+P313 IF SWALLOWED: Get medical advice / attention

CLASSIFICATION ACCORDING TO EU DIRECTIVES 67/548/EEC AND 1999/45/EEC

Xn Harmful R22
N Dangerous for the environment R53

LABELLING ACCORDING TO EU DIRECTIVE 67/548/EEC

Harmful
Risk Phrases
R22 Harmful if swallowed
R53 May cause long-term adverse effects in the aquatic environment

Safety Phrases
S46 If swallowed, seek medical advice immediately and show this container or label

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>EC #</th>
<th>CAS #</th>
<th>Content</th>
<th>Classification</th>
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</thead>
<tbody>
<tr>
<td>CALCOFLUOR M2R</td>
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<td>4404-43-7</td>
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<td>Eye Irrit. 2</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Xi; R36</td>
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<tr>
<td>SODIUM AZIDE</td>
<td>247-852-1</td>
<td>26628-22-8</td>
<td>&lt;0.1%</td>
<td>Acute Tox. 2; Aquatic Acute 1;</td>
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<td></td>
<td></td>
<td></td>
<td>Aquatic Chronic 1; H300; H410</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>T; R28; R32; N; R50; R53</td>
</tr>
</tbody>
</table>

4. FIRST-AID MEASURES

INHALATION
Move the exposed person to fresh air at once. Get medical attention if any discomfort continues. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.

INGESTION
Do not induce vomiting. Never make an unconscious person vomit or drink fluids. Get medical attention immediately. Show the label or this document to the physician.

SKIN CONTACT
Remove contaminated clothes and rinse skin thoroughly with water. If symptoms occur seek medical attention.

EYE CONTACT
Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eyelids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA
Use: Alcohol-resistant foam. Dry chemicals, sand, dolomite etc. Water spray, fog or mist.

PROTECTIVE MEASURES IN FIRE
Self contained breathing apparatus and full protective clothing must be worn in case of fire.
6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
Wear protective clothing as described in Section 8 of this safety data sheet. Evacuate personnel from the affected area.

ENVIRONMENTAL PRECAUTIONS
Do not allow spillage to enter watercourses, drains or sewers. Stop leak if possible without risk.

SPILL CLEAN-UP METHODS
Provide ventilation and confine spill. Do not allow runoff to sewer. Inform Authorities if large amounts are involved. Absorb with vermiculite, dry sand or earth. Shovel up residue and collect for authorised disposal (see section 13). Flush area with plenty of water.

7. HANDLING & STORAGE

USAGE PRECAUTIONS
Avoid spilling, skin and eye contact.

STORAGE PRECAUTIONS
Store in tightly closed original container in a cool, dry well-ventilated place. Ground container and transfer equipment to eliminate static electric sparks. May attack some plastics, rubber and coatings.

STORAGE CLASS
Chemicals storage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING MEASURES
Provide adequate general and local exhaust ventilation. Provide explosion-proof ventilation for high concentrations.

PROTECTIVE EQUIPMENT

HAND PROTECTION
Use protective gloves made of: Butyl rubber (immersion protection) or Nitrile rubber (splash protection). The most suitable glove should be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

EYE PROTECTION
Wear approved, tight-fitting safety glasses where splashing is probable.
RESPIRATORY EQUIPMENT
Self-contained breathing apparatus where high vapour levels are likely.

OTHER PROTECTION
Provide eyewash station.

HYGIENE MEASURES
DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>INFORMATION</th>
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<tbody>
<tr>
<td>APPEARANCE</td>
<td>Pale Yellow Liquid</td>
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<tr>
<td>ODOUR</td>
<td>None</td>
</tr>
<tr>
<td>(SOLUBILITY) / MISCIBLE WITH:</td>
<td>Water; Ethanol; Ether; Benzene; Organic solvents</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY</td>
<td>1.05 @ 20 °C</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

STABILITY
Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID
Extremes of temperature, direct sunlight.

INCOMPATIBLE MATERIALS
Strong oxidizers, Acids, Reducing agents, Alkali metals.

HAZARDOUS DECOMPOSITION PRODUCTS
During fire, toxic gases (CO, CO₂) are formed.

11. TOXICOLOGICAL INFORMATION

INHALATION
May be harmful by inhalation. May cause respiratory tract irritation.

INGESTION
May be harmful if swallowed.

SKIN CONTACT
Causes severe skin burns. May be harmful by absorption through the skin.

EYE CONTACT
Causes severe eye burns.
12. ECOLOGICAL INFORMATION

ECOTOXICITY
Avoid release to the environment. May cause long-lasting harmful effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>UN #</th>
<th>Class</th>
<th>Packing</th>
<th>Proper shipping name</th>
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<td>RID / ADR</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>IATA</td>
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<td></td>
<td>Not regarded as hazardous for transport</td>
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<tr>
<td>IMDG</td>
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15. REGULATORY INFORMATION

STATUTORY INSTRUMENTS
This MSDS complies with regulation (EC) no. 1907/2006. Workplace Exposure Limits EH40/2011.

16. OTHER INFORMATION

GENERAL INFORMATION
This safety data sheet covers all codes for this product.

REVISION INFORMATION

Revision No. 03
Revision Date 04/2013
Comments GHS regulations incorporated
Replaces Document Generated 06/2009

HAZARD & RISK PHRASES IN FULL

H300 Fatal if swallowed
H302 Harmful if swallowed
H319 Causes serious eye irritation
H410 Very toxic to aquatic life with long lasting effects
H413 May cause long lasting harmful effects to aquatic life
R22 Harmful if swallowed.
R28 Very toxic if swallowed
R32 Contact with acids liberates very toxic gas
R36 Irritating to eyes
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment