Safety Data Sheet

Trihexyltetradecylphosphonium bromide (CYPHOS IL-102)

Revision Date: 12/09/2015
Date Issued: 2/8/2018

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product name Trihexyltetradecylphosphonium bromide (CYPHOS IL-102)
Product code IN-0007
CAS 654057-97-3
REACH No. A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

Identified uses Laboratory chemicals, Manufacture of substances
Supplier IoLiTec
Ionic Liquids Technologies GmbH
Salzstrasse 184
D – 74076 Heilbronn
Germany
Telephone +49 (0)7131-89839-0
Fax +49 (0)7131-89839-109
Emergency telephone +49 (0)176-84850874
Email msds@iolitec.de

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification (REGULATION (EC) No 1272/2008)

Caution! Substance not yet fully tested. Risks cannot be excluded if the product is handled inappropriately. For laboratory use only!
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Classification (67/548/EEC or 1999/45/EC)

Caution! Substance not yet fully tested. Risks cannot be excluded if the product is handled inappropriately. For laboratory use only!

2.2 Label elements
Labelling (REGULATION (EC) No 1272/2008)

Substance not yet fully tested.

Hazard statements

H-phrases
Substance not yet fully tested.

Precautionary statements

P phrases
P262: Do not get in eyes, on skin, or on clothing
P280: Wear protective gloves/ protective clothing/ eye protection/ face protection
P305 + P351 + P338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P313: Get medical advice/attention

Labelling (67/548/EEC or 1999/45/EC)

Substance not yet fully tested.

Risk phrases
Not fully tested substance.
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Safety phrases
S: 24/25 Avoid contact with skin and eyes.
S: 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S: 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S:28,2 After contact with skin, wash immediately with plenty of water and liquid soap.

3 COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Contents</th>
<th>Health(Class)</th>
<th>Risk(R/No.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trihexyltetradecylphosphonium bromide (CYPHOS IL-102)</td>
<td>&gt;95%</td>
<td>Substance not yet fully tested!</td>
<td></td>
</tr>
</tbody>
</table>

4 FIRST AID MEASURES

General
Contaminated clothing should be removed and washed before being reused.

Inhalation
Move the exposed person to fresh air at once. If respiratory problems, provide artificial respiration/oxygen.

Ingestion
Immediately rinse mouth and provide fresh air. Do not induce vomiting. Get medical attention immediately.

Skin
Wash the skin immediately with soap and water.

Eyes
Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.
## 5 FIRE FIGHTING MEASURES

<table>
<thead>
<tr>
<th>Extinguishing media</th>
<th>Use: Water spray, fog or mist. Carbon dioxide (CO₂). Dry chemicals, sand, dolomite etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special fire fighting procedures</td>
<td>Avoid water in straight hose stream, will scatter and spread fire. Keep run-off water out of sewers and water sources. Dike for water control.</td>
</tr>
<tr>
<td>Unusual fire &amp; explosion hazards</td>
<td>Fire causes formation of toxic gases.</td>
</tr>
<tr>
<td>Protective measures in fire</td>
<td>Wear self-contained breathing apparatus as combustion may produce hazardous fumes.</td>
</tr>
</tbody>
</table>

## 6 ACCIDENTAL RELEASE MEASURES

<table>
<thead>
<tr>
<th>Personal precautions during spill</th>
<th>Wear protective clothing and avoid inhalation of vapor, skin or eye contact.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precautions to protect environment</td>
<td>Avoid washing into water courses. Avoid contaminating public drains or water supply.</td>
</tr>
<tr>
<td>Spill cleanup methods</td>
<td>Avoid contact with skin or inhalation of spillage, dust or vapor, Avoid dust formation. Collect and reclaim or dispose in sealed containers in license waste. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate.</td>
</tr>
</tbody>
</table>
7 HANDLING AND STORAGE

Usage precautions
Keep away from heat, sparks and open flame.
Do not use in confined spaces without adequate ventilation and/or respirator.

Storage precautions
Store at moderate temperatures in dry, well ventilated area.

Storage criteria
Chemical storage.

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Protective equipment
Safety goggles. Chemical resident gloves.
Protective clothing.

Process control measures
Provide eyewash station and safety shower.
Use engineering controls to reduce air contamination to permissible exposure levels.

Ventilation
Provide adequate general and local exhaust ventilation.

Respirators
Use high efficiency particulate respirator with appropriate filter.

Other protection
Wear overalls and industrial shoes.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Liquid.

Color
Colorless to yellow.

Odor/taste
No characteristic odor.
10 STABILITY AND REACTIVITY

Stability          No particular stability concerns.
Conditions to avoid Avoid contact to strong oxidizers and bases.
Hazardous
Decomposition Products High temperatures generate: Corrosive
gases/vapor/fumes of: Carbon dioxide (CO$_2$).
Carbon monoxide (CO). Nitrous gases (NOx).

11 TOXICOLOGICAL INFORMATION

Ingestion         not available.
Skin              not available.
Eyes              not available
Data on the toxicity of this product are not available. Hazardous properties
cannot be excluded.

12 ECOLOGICAL INFORMATION

Environmental hazards Avoid washing into water courses. Avoid
contaminating public drains or water supply.

13 DISPOSAL CONSIDERATIONS

Disposal method    Contact specialist disposal companies. Dispose
of in accordance with Local Authority
requirements. Recover and reclaim or recycle, if practical.
## 14 TRANSPORT INFORMATION

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<tr>
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<th>Not classified as dangerous for transport purposes.</th>
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<tr>
<td>UN No.</td>
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<td>Road transport notes</td>
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</tr>
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<td>Sea transport notes</td>
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<td>Air transport notes</td>
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## 15 REGULATORY INFORMATION

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S:28,2 After contact with skin, wash immediately with plenty of water and liquid soap.

Country specific information

Germany WGK: 3 (Self-Classification)

16 OTHER INFORMATION

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