What are ICSC?
The International Chemical Safety Cards (ICSC) are data sheets intended to provide essential safety and health information on chemicals in a clear and concise way. The primary aim of the Cards is to promote the safe use of chemicals in the workplace and the main target users are workers. The ICSC project is a joint venture between the World Health Organization (WHO) and the International Labour Office (ILO), with the cooperation of the European Commission.

ICSC are prepared in English.

National institutions translate ICSC into different languages:
Chinese, Dutch, Finnish, French, German, Hungarian, Italian, Japanese, Polish, Spanish and others.

www.ilo.org/icsc

How are ICSC produced?
The Cards are prepared in English by ICSC participating institutions and peer reviewed in biannual meetings before being made public. Existing Cards are updated periodically by a peer-review group to take account of the latest scientific developments. New Cards are proposed by countries or stakeholder groups.

Are ICSC authoritative?
- The International peer-review process followed in the preparation of ICSC ensures the authoritative nature of the Cards and represents a significant asset.
- ICSC complement any available chemical safety data sheet.
- ICSC are made available free-of-charge.
- ICSC have no legal status.

The information provided in the Cards is in line with:
- ILO Chemicals Convention, 1990 (No. 170)
- ILO Chemicals Recommendation, 1990 (No. 177)
- United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

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Switzerland
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Email: ipcsmail@who.int
www.who.int/ipcs
**What information is provided in ICSC?**

1. Identity of the chemical
2. Fire and explosion hazards
3. Acute health hazards
4. Spillage disposal, storage and packaging
5. Preventive measures
6. Fire fighting
7. First aid
8. Classification and labelling
9. Physical and chemical properties and dangers
10. Short-term and long-term health effects
11. Regulatory information
12. Environmental data

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**ICSC are a support tool for the implementation of the ILO Chemicals Convention**

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**PHYSICAL & CHEMICAL INFORMATION**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Colourless to yellow liquid, with pungent odour.</td>
</tr>
<tr>
<td>Appearance</td>
<td></td>
</tr>
<tr>
<td>Boiling point</td>
<td>121°C</td>
</tr>
<tr>
<td>Melting point</td>
<td>-41.6°C</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.4</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Miscible</td>
</tr>
<tr>
<td>Vapour pressure 20°C</td>
<td>6.4 kPa</td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>2.2</td>
</tr>
<tr>
<td>Octanol/water partition coefficient</td>
<td>-0.21</td>
</tr>
</tbody>
</table>

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**EXPOSURE & HEALTH EFFECTS**

**ROUTES OF EXPOSURE:**
Serious local effects by all routes of exposure.

**EFFECTS OF SHORT-TERM EXPOSURE:**
- The substance is corrosive to the eyes, the skin and the respiratory tract.
- Corrosive on ingestion. Inhalation may cause lung oedema (see Notes).
- The effects may be delayed (See Notes).

**INHALATION RISK:**
A harmful contamination of the air can be reached very quickly on evaporation of this substance at 20°C.

**EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:**
- Lungs may be affected by repeated or prolonged exposure to the vapour. The substance may have effects on the teeth, resulting in tooth erosion.

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**OCCUPATIONAL EXPOSURE LIMITS**

<table>
<thead>
<tr>
<th>Standard</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLV</td>
<td>2 ppm as TWA, 4 ppm as STEL</td>
</tr>
<tr>
<td>MAK</td>
<td>IIb (not established but data is available) (DFG 2008).</td>
</tr>
</tbody>
</table>

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**ENVIRONMENT**

**NOTES**
Depending on the degree of exposure, periodic medical examination is suggested. The symptoms of lung oedema do not become manifest until a few hours or even a few days have passed and they are aggravated by physical effort.

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**ADDITIONAL INFORMATION**

**EU Classification & Labelling**

- Symbol: O, C
- R: 8 - 35
- S: (1/2-) 23 - 26 - 36 - 45
- Note: B

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**LEGAL NOTICE**
Neither the CEC nor the IPCS nor any person acting on behalf of the CEC or the IPCS is responsible for the use which might be made of this information.