



## Education and Training

Comenius - European Cooperation on School Education

Hands-on Science (H-Sci) Project: Chemical Safety Database

# Chemical Safety Data: Iodine



Common synonyms	None
Formula	I <sub>2</sub>
Physical properties	<p>Form: purple to black crystals</p> <p>Stability: Stable.</p> <p>Melting point: 113 - 114 C, but sublimates at room temperature</p> <p>Water solubility: slight</p> <p>Specific gravity: 4.93</p> <p>Vapour pressure at 25 C: 0.31 mm Hg</p>
Principal hazards	<p>Iodine is very toxic if swallowed or inhaled.</p> <p>Iodine has a significant vapour pressure at room temperature which can lead to the build-up of dangerous levels of iodine vapour.</p> <p>Exposure to iodine may lead to reproductive damage.</p> <p>Iodine may be absorbed through the skin.</p>
Safe handling	<p>Wear safety glasses.</p> <p>Iodine should not be handled in the open lab except for very short periods. It sublimates at room temperature and exposure to the vapour is very harmful.</p> <p>Wear gloves if skin contact is likely.</p>

Emergency	Eye contact: Immediately flush the eye with plenty of water. Continue for at least ten minutes and call for medical help. Skin contact: Wash off with soap and water. Remove any contaminated clothing. If the skin reddens or appears damaged, call for medical aid. If swallowed: Wash out the mouth with water if the person is conscious. Call for immediate medical help.
Disposal	Iodine is toxic and may be an environmental hazard. It should not be disposed of down sinks - consult local rules to determine how to deal with waste iodine.
Protective equipment	Safety glasses. If you need gloves, polyethylene is a suitable material. Nitrile gloves may also be used for short periods.
Further information	<u><a href="#">Iodine</a></u> <u><a href="#">Chemicals in the HSci database</a></u> <u><a href="#">More extensive safety data</a></u>

[Link to the Oxford HSci web site](#)

We have tried to make this information as accurate and useful as possible, but can take no responsibility for its use, misuse, or accuracy. We have not verified this information, and cannot guarantee that it is up-to-date.

Oxford, January 15, 2004