



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (Reach)

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifiers

Product name : 1-Iodobutane

Product Number : CHE2226

Brand : SLS

CAS-No. : 542-69-8

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Scientific Laboratory Supplies  
Wilford Industrial Estate,  
Ruddington lane, Wilford  
Nottingham  
NG11 7EP, United Kingdom

Telephone : +44 (0) 115 981 1111

Fax : +44 (0) 115 982 5275

E-mail address : slsinfo@scientific-labs.com

### 1.4 Emergency telephone number

Emergency Phone # : +44 (0) 115 982 5275

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]**

Flammable liquids (Category 3)

Acute toxicity, Inhalation (Category 3)

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

Flammable. Harmful by inhalation.

### 2.2 Label elements

**Labelling according Regulation (EC) No 1272/2008 [CLP]**



Pictogram

Signal word

Danger

Hazard statement(s)

H226

Flammable liquid and vapour.

H331

Toxic if inhaled.

Precautionary statement(s)

P261

Avoid breathing vapours.

P311

Call a POISON CENTER or doctor/ physician.

Supplemental Hazard  
Statements

none

According to European Directive 67/548/EEC as amended.



Hazard symbol(s)

R-phrases

R10

Flammable.

R20

Harmful by inhalation.

S-phrases

none

### 2.3 Other hazards - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

Synonyms : Butyl iodide

Formula : C<sub>4</sub>H<sub>9</sub>I

Molecular Weight : 184.02 g/mol

Component		Classification	Concentration
1-Iodobutane			
CAS-No.	542-69-8	Flam. Liq. 3; Acute Tox. 3; H226, H331	-
EC-No.	208-824-4		
		Xn, R10 - R20	
Copper			
CAS-No.	7440-50-8	R53	< 10 %
EC-No.	231-159-6		

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

Cough, Shortness of breath, Headache, Nausea, Vomiting

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

no data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

## **5.2 Special hazards arising from the substance or mixture**

Carbon oxides, Hydrogen iodide, Copper oxides

## **5.3 Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

## **5.4 Further information**

Use water spray to cool unopened containers.

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## **6. ACCIDENTAL RELEASE MEASURES**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

### **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### **6.3 Methods and materials for containment and cleaning up**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

### **6.4 Reference to other sections**

For disposal see section 13.

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## **7. HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

### **7.2 Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Light sensitive.

### **7.3 Specific end use(s)**

no data available

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## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1 Control parameters**

#### **Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

### **8.2 Exposure controls**

#### **Appropriate engineering controls**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

#### **Personal protective equipment**

##### **Eye/face protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

### **Body Protection**

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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## **9. PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1 Information on basic physical and chemical properties**

a) Appearance	Form: clear, liquid Colour: light yellow
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	Melting point/range: -103 °C - lit.
f) Initial boiling point and boiling range	130 - 131 °C - lit.
g) Flash point	33 °C - closed cup
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapour pressure	no data available
l) Vapour density	6.35 - (Air = 1.0)
m) Relative density	1.617 g/cm <sup>3</sup> at 25 °C
n) Water solubility	no data available
o) Partition coefficient: n-octanol/water	no data available
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties	no data available
t) Oxidizing properties	no data available

### **9.2 Other safety information**

no data available

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## **10. STABILITY AND REACTIVITY**

### **10.1 Reactivity**

no data available

- 10.2 Chemical stability**  
no data available  
Contains the following stabiliser(s):  
Copper ( $\leq 1\%$ )
- 10.3 Possibility of hazardous reactions**  
no data available
- 10.4 Conditions to avoid**  
Heat, flames and sparks.
- 10.5 Incompatible materials**  
Strong oxidizing agents, Strong bases
- 10.6 Hazardous decomposition products**  
Other decomposition products - no data available
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## **11. TOXICOLOGICAL INFORMATION**

### **11.1 Information on toxicological effects**

#### **Acute toxicity**

no data available

LC50 Inhalation - rat - 4 h - 6,100 mg/m<sup>3</sup>

no data available

#### **Skin corrosion/irritation**

no data available

#### **Serious eye damage/eye irritation**

no data available

#### **Respiratory or skin sensitization**

no data available

#### **Germ cell mutagenicity**

#### **Carcinogenicity**

Carcinogenicity - mouse - Intraperitoneal

Tumorigenic:Neoplastic by RTECS criteria. Lungs, Thorax, or Respiration:Tumors.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### **Reproductive toxicity**

#### **Specific target organ toxicity - single exposure**

no data available

#### **Specific target organ toxicity - repeated exposure**

no data available

#### **Aspiration hazard**

no data available

#### **Potential health effects**

##### **Inhalation**

Toxic if inhaled. May cause respiratory tract irritation.

##### **Ingestion**

May be harmful if swallowed.

##### **Skin**

May be harmful if absorbed through skin. May cause skin irritation.

##### **Eyes**

May cause eye irritation.

#### **Signs and Symptoms of Exposure**

Cough, Shortness of breath, Headache, Nausea, Vomiting

#### **Additional Information**

RTECS: EK4400000

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**12. ECOLOGICAL INFORMATION****12.1 Toxicity**

no data available

**12.2 Persistence and degradability**

no data available

**12.3 Bioaccumulative potential**

no data available

**12.4 Mobility in soil**

no data available

**12.5 Results of PBT and vPvB assessment**

no data available

**12.6 Other adverse effects**

Harmful to aquatic life with long lasting effects.  
no data available

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**13. DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods****Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

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**14. TRANSPORT INFORMATION****14.1 UN number**

ADR/RID: 1993

IMDG: 1993

IATA: 1993

**14.2 UN proper shipping name**

ADR/RID: FLAMMABLE LIQUID, N.O.S. (1-Iodobutane)

IMDG: FLAMMABLE LIQUID, N.O.S. (1-Iodobutane)

IATA: Flammable liquid, n.o.s. (1-Iodobutane)

**14.3 Transport hazard class(es)**

ADR/RID: 3

IMDG: 3

IATA: 3

**14.4 Packaging group**

ADR/RID: III

IMDG: III

IATA: III

**14.5 Environmental hazards**

ADR/RID: no

IMDG Marine Pollutant: no

IATA: no

**14.6 Special precautions for user**

no data available

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**15. REGULATORY INFORMATION**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

no data available

**15.2 Chemical Safety Assessment**

no data available

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**16. OTHER INFORMATION**

Text of H-code(s) and R-phrases mentioned in Section 3

Acute Tox.	Acute toxicity
Flam. Liq.	Flammable liquids
H226	Flammable liquid and vapour.
H331	Toxic if inhaled.
Xn	Harmful
R10	Flammable.
R20	Harmful by inhalation.
R53	May cause long-term adverse effects in the aquatic environment.

#### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

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