

**Material Safety Data Sheet**

according to Regulation (EC) No. 1907/2006

**4-ISOCYANATOBENZOYL CHLORIDE**

Revision date 23.04.2025  
Version 1  
Replaces version from -

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**1. Identification of the substance/Mixture and of the company/undertaking**

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**1.1 Product identifier**

Product name 4-Isocyanatobenzoyl chloride  
CAS-No. 3729-21-3

**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**

Name Valsynthese SA  
Factory address Valsynthese SA  
Fabrikstrasse 48  
PO Box 636  
3900 Brig / Switzerland  
Office address Valsynthese SA  
Societe Suisse des Explosifs Group  
PO Box 636  
3900 Brig / Switzerland

Information Departement This number is available only during office hours.  
Phone +41 27 922 71 11  
E-Mail (Responsible person):  
msds@sse-group.com

**1.4 Emergency Phone Number** +41 27 922 71 11 (only during office hours) or  
Toxicological Information Centre in Switzerland: Tel. 145  
or +41 (0) 44 251 51 51

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## 2. Hazards Identification

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### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Toxicity, Oral (Category 3), H301

Skin corrosion / irritation (Category 1A), H314

Serious eye damage / eye irritation (Category 1), H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 Label elements

#### Labelling according Regulation (EC) No 1272/2008

Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

H301

Toxic if swallowed.

H314

Causes severe skin burns and eye damage.

Precautionary statement(s)

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310

Immediately call a POISON CENTER or doctor/physician.

P330

Rinse mouth.

Supplemental Hazard Statements

none

### 2.3 Other hazards

PBT: Not applicable

vPvB: Not applicable

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## 3. Composition / Information on ingredients

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### 3.1 Substance

Product name

4-Isocyanatobenzoyl chloride

Molecular formula

C<sub>8</sub>H<sub>4</sub>ClNO<sub>2</sub>

Molecular weight 181.58 g/mol  
CAS-No. 3729-21-3

**Hazardous ingredients according to Regulation (EC) No 1272/2008**

Component	Classification	Concentration
<b>4-Isocyanatobenzoyl chloride</b>		
CAS-No. 3729-21-3	Acute Tox. 3; Skin. Corr. 1A; Eye Irrit. 1; H301;H314;H318	<=100%

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

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## 4. First-aid measures

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### 4.1 Description of first aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
If swallowed	Rinse mouth with water and then drink plenty of water. Immediate medical treatment is required if symptoms persist.
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. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Self-protection of the first aider	Ensure that medical personnel are informed about the substance(s) involved, take measures to protect themselves and prevent the spread of contamination.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

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

Symptomatic treatment.

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## 5. Fire fighting measures

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### 5.1 Extinguishing media

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given.



## 5.2 Special hazards arising from the substance or mixture

Carbon oxides  
Nitrogen oxides (NOX)  
Hydrogen chloride gas

## 5.3 Advice for fire fighters

In the event of fire, wear self-contained breathing apparatus.

## 5.4 Additional information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

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# 6. Accidental release measures

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## 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

## 6.2 Environmental precautions

Do not let product enter drains.

## 6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

## 6.4 Reference to other sections

For further and detailed information see section 8 and 13.

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# 7. Handling and storage

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## 7.1 Precautions for safe handling

Wear personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Do not swallow or inhale. Avoid dust formation.

### Hygiene measures

Handle with good industrial hygiene and safety techniques. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using. Remove and wash contaminated clothing before reuse. Wash hands before breaks and after work

## 7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed and store in a dry and well-ventilated place. Opened containers must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature see product label.

Storage class (TRGS 510): No data available



### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

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## 8. Exposure controls / Personal protection

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### 8.1 Control parameters

#### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Personal protective equipment

Eye/face protection	Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection	<p>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.</p> <p>The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.</p>
Body Protection	Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	<p>required when dusts are generated.</p> <p>Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.</p> <p>Recommended Filter type: Filter type P3.</p> <p>The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.</p>
Environmental exposure controls	Do not let product enter drains.

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## 9. Physical and chemical properties

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### 9.1 Information on basic physical and chemical properties

Physical state	solid
Color	white



Odour	No data available
pH value	No data available
Melting point/freezing point	36-38 °C – lit.
Initial boiling point and boiling range	36-38 °C – lit. At 0.09 hPa (0.07 mmHg) – lit.
Flash point	113 °C – closed cup
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Relative density	1.317 g/cm <sup>3</sup> at 25 °C
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
Particle characteristics	No data available
Explosive properties	No data available
Oxidizing properties	No data available

## 9.2 Other information

No data available

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## 10. Stability and reactivity

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### 10.1 Reactivity

None known, according to available information.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

Heat, flames and sparks. Extreme temperatures and direct sunlight.

### 10.5 Incompatible materials

Strong oxidizing agents, water.



### 10.6 Hazardous decomposition products

In the event of fire: see section 5

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## 11. Toxicological information

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### 11.1 Information on toxicological effects

Acute toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	No data available
Eye damage/irritation	No data available
Respiratory or skin sensitisation	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	No data available
Reproductive toxicity	No data available
STOT-single exposure	No data available
STOT-repeated exposure	No data available
Aspiration hazard	No data available

### 11.2 Additional information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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## 12. Ecological information

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### 12.1 Toxicity

No data available

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulation 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 Endocrine disrupting properties

No data available



### 12.7 Other adverse effects

No data available

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## 13. Disposal considerations

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### 13.1 Waste treatment methods

#### Product

The waste is classified as hazardous. Disposal according to EC directives on Waste and Hazardous Waste. Dispose of in accordance with local regulations.

#### Contaminated packaging

Dispose of this container at a hazardous waste collection point.

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## 14. Transport information

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### 14.1 UN Number

ADR/RID: 2923

IMDG: 2923

IATA: 2923

### 14.2 UN proper shipping name

ADR/RID: Corrosive solid,  
toxic, n.o.s.

IMDG: Corrosive solid,  
toxic, n.o.s.

IATA: Corrosive solid,  
toxic, n.o.s.

### 14.3 Transport hazard class(es)

ADR/RID: 8 (6.1)

IMDG: 8 (6.1)

IATA: 8 (6.1)

### 14.4 Packing group

ADR/RID: II

IMDG: II

IATA: II

### 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

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

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

### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.





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## 16. Other information

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### 16.1 Information regarding the revision of the safety data sheet

Data compared to the previous version altered.

### 16.2 Full text of H-Statements referred to under sections 2 and 3

H301	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

### 16.3 Additional information

The information contained herein is in conformity with EU Directive EC 1907/2006 and EC 1272/2008, and is believed to be accurate and represents the best information currently available to us on the date of publication. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Valsynthese SA be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Valsynthese SA has been advised of the possibility of such damages.

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