

**Material Safety Data Sheet**  
according to Regulation (EC) No. 1907/2006

**HEXYL NITRITE**

Revision date 25.02.2025  
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 Hexyl Nitrite  
CAS-No. 638-51-7

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

Identified uses For research use only. Not intended for diagnostic or therapeutic use.

**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]

Flammable liquids (Category 2), H225  
Acute toxicity, Oral (Category 4), H302  
Acute toxicity, Dermal (Category 4), H312  
Acute toxicity, Inhalation (Category 4), H332

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)

H225	Highly flammable liquid and vapor.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled

Precautionary statement(s)

P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233	Keep container tightly closed.
P301+P312	IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.
P304+P340+P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P308+P313	IF exposed or concerned: Get medical advice/ attention.

### 2.3 Other hazards

none



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### 3. Composition / Information on ingredients

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#### 3.1 Substance

Product name	Hexyl Nitrite
Molecular formula	C <sub>6</sub> H <sub>13</sub> NO <sub>2</sub>
Molecular weight	131.18 g/mol
CAS-No.	638-51-7

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

Component	Classification	Concentration
<b>Hexyl Nitrite</b>		
CAS-No. 638-51-7	Flam. Liq. 2; Acute Tox. 4; Acute Tox. 4; Acute Tox. 4; H225; H302; H312; H332	<=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	Never give anything by mouth to an unconscious person. Clean mouth with. Consult a physician.
If inhaled	Remove to fresh air. If breathing is difficult, give oxygen. 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.

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

No data available

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

Treat symptomatically

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## 5. Fire fighting measures

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### 5.1 Extinguishing media

Suitable extinguishing media      Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

flammable  
Carbon oxides. Nitrogen oxides (NOx)

### 5.3 Advice for fire fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### 5.4 Additional information

No data available

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## 6. Accidental release measures

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

Remove all sources of ignition. Use personal protective.

### 6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system.

### 6.3 Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do. Soak up with inert absorbent material.

### 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

Handle in accordance with good industrial hygiene and safety practice.

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

Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

### 7.3 Specific end use(s)

The information required is contained in this Material Safety Data Sheet.



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## 8. Exposure controls / Personal protection

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### 8.1 Control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### 8.2 Exposure controls

#### Appropriate engineering controls

Showers  
Eyewash stations  
Ventilation systems

#### 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	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. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Environmental exposure controls	No information available.

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## 9. Physical and chemical properties

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### 9.1 Information on basic physical and chemical properties

Physical State	liquid
Odour	No data available
Odour threshold	No data available
pH value	No data available
Melting point/freezing point	No data available



Initial boiling point and boiling range	52 °C
Flash point	22 °C
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	No data available
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	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

Not applicable

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

Extremes of temperature and direct sunlight.

### 10.5 Incompatible materials

Strong oxidizing agents.

### 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	Product does not present an acute toxicity hazard based on known or supplied information.
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

### 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

May cause long lasting harmful effects to aquatic life.

### 12.2 Persistence and degradability

No information available

### 12.3 Bioaccumulation potential

No information available

### 12.4 Mobility in soil

No information available

### 12.5 Results of PBT and vPvB assessment

No information available

### 12.6 Other adverse effects

No information available



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## 13. Disposal considerations

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### 13.1 Waste treatment methods

#### Product

Disposal should be in accordance with applicable regional, national and local laws and regulations.

#### Contaminated packaging

Do not reuse container.

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## 14. Transport information

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### 14.1 UN Number

ADR/RID: 1993                      IMDG: 1993                      IATA: 1993

### 14.2 UN proper shipping name

ADR/RID:                              IMDG:                              IATA:  
Flammable liquid, n.o.s.      Flammable liquid, n.o.s.      Flammable liquid, n.o.s.

### 14.3 Transport hazard class(es)

ADR/RID: 3                              IMDG: 3                              IATA: 3

### 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

274, 601, 640D                      274                              A3  
Classification code F1                      EmS-No F-E, S-E                      ERG Code 3H  
Tunnel restriction code  
(D/E)

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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

#### EU legislation authorisations

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission





Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

COMMISSION REGULATION (EC) No 790/2009 of 10 August 2009 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures.

DIRECTIVE 1999/45/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations.

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

### **15.2 Chemical safety assessment**

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

### **15.3 Additional information**

No data available

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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**

H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H312	Harmful in contact with skin
H332	Harmful if inhaled

### **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.

