VALSYNTHESE

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

(*S*)-4-ISOPROPYLOXAZOLIDINE-2,5-DIONE

Revision date	06.01.2016
Version	1
Replaces version from	-

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

1.1 Product identifier

Product name	(*S*)-4-Isopropyloxazolidine-2,5-dione
CAS-No.	24601-74-9
EC-No.	-

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

For R&D use only.

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 Department	This number is available only during office hours. Phone +41 27 922 71 11 E-Mail (Responsible person): msds@explosif.ch
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

2. Hazards Identification

2.1 Classification of the substance or mixture

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

Acute toxicity, Oral (Category 4), H302
Skin irritation (Category 2), H315
Eye irritation (Category 2), H319
Specific target organ toxicity - single exposure (Category 3), H335

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

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

Xn	Harmful	R22;
Xi	Irritant	R36/37/38

For the full text of the R-phrases mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Hazard pictogram(s)

Signal word	Warning
Hazard statement(s)	
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
Precautionary statement(s)	
P261	Avoid breathing dust.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3 Other hazards

None

3. Composition / Information on ingredients

3.1 Substance

Product name	(*S*)-4-Isopropyloxazolidine-2,5-dione
Molecular formula	$C_6H_9NO_3$
Molecular weight	143.141 g/mol
Cas-No.	24601-74-9
EC-No.	-

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

Component	Classification	Concentration
(*S*)-4-Isopropyloxazolidine -2,5-dione		
CAS-No. 24601-74-9 EC-No. -	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H302; H315; H319; H335	<=100%

Hazardous ingredients according to Directive 1999/45/EC

Component	Classification	Concentration
(*S*)-4-Isopropyloxazolidine -2,5-dione		
CAS-No. 24601-74-9 EC-No. -	Xn, R22; Xi, R36/37/38	<=100%

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 swallowed	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
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.

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

No data available

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Use water spray, chemical foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Strong water jet.

5.2 Special hazards arising from the substance or mixture

Carbon monoxide, carbon dioxide, nitrogen oxides.

5.3 Advice for fire fighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Additional information

No data available

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use proper personal protective equipment.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Vacuum or sweep up material and place into suitable disposal container. Avoid generating dusty conditions.

6.4 Reference to other sections

For further and detailed information see section 8 and 13.

6.5 Additional Information

No data available

7. Handling and storage

7.1 Precautions for safe handling

Avoid breathing dust, vapor, mist or gas. Avoid contact with eyes, skin.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Storage temperature: 2 - 4 °C (short period); -20°C (longer period)

7.3 Specific end use(s)

No data available

8. Exposure controls / Personal protection

8.1 Control parameters

No data available

8.2 Exposure controls

Appropriate engineering controls

Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower. Use adequate ventilation to keep airborne concentrations low.

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	The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Environmental exposure controls	Do not let product enter drains.

8.3 Additional information

No data available

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	White to off-white powder
Odour	No data available
Odour threshold	No data available
pH value	No data available

Melting point/freezing point	70-71°C
Initial boiling point and boiling range	No data available
Flash point	No data available
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	1.18 g/cm^3
Water solubility	Slightly soluble
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

10. Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

This product is relatively unstable under normal temperature.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Carbon monoxide, carbon dioxide and nitrogen oxides.

11. Toxicological information

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	Inhalation - May cause respiratory irritation.
STOT-repeated exposure	No data available
Aspiration hazard	No data available

Additional information

No data available

12. Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

2.3 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 Other adverse effects

No data available

13. Disposal considerations

13.1 Waste treatment methods

Product

The substance and contaminated packaging should be treated as chemical waste must be incinerated. Observe national and local regulations when disposing of the substance and contaminated packaging.

Contaminated packaging

Dispose of as unused product.

14. Transport information

14.1 UN Number

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4 Packing group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: - IMDG Marine pollutant: - IATA: -

14.6 Special precautions for user

No data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

15. Regulatory information

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

No data available

15.3 Additional information

No data available

16. Other information

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

Acute Tox.	Acute toxicity
Skin Irrit.	Skin irritation
Eye Irrit.	Eye irritation
STOT SE	Specific target organ toxicity - single exposure
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

16.3 Full text of R-phrases referred to under sections 2 and 3

Xn	Harmful.
Xi	Irritant.
R22	Harmful if swallowed.
R36/37/38	Irritating to eyes, respiratory system and skin.

16.4 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.