

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

**4,4'-(HEXAFLUOROISOPROPYLIDENE)DIPHthalic ANHYDRIDE**

Revision date 30.10.2025  
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 4,4'-(Hexafluoroisopropylidene)diphthalic anhydride  
CAS-No. 1107-00-2  
EC-No. 214-170-0

**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]

Skin corrosion (Sub-category 1B), H314

Serious eye damage (Category 1), H318

Specific target organ toxicity -single exposure, (Category 3), Respiratory system, H335

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)

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

Precautionary statement(s)

P260 Do not breathe dusts or mists.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ protective clothing/ eye protection/ Face protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard Statements

none

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.



Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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### 3. Composition / Information on ingredients

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#### 3.1 Substance

Product name	4,4'-(Hexafluoroisopropylidene)diphthalic anhydride
Molecular formula	C <sub>19</sub> H <sub>6</sub> F <sub>6</sub> O <sub>6</sub>
Molecular weight	444,24 g/mol
CAS-No.	1107-00-2
EC-No.	214-170-0

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

Component	Classification	Concentration
<b>4,4'-(Hexafluoroisopropylidene)diphthalic anhydride</b>		
CAS-No.	1107-00-2	Skin Corr. 1B; Eye Dam. 1; STOT SE 3;
EC-No.	214-170-0	H314, H318, H335

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	First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.
If swallowed	After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.
If inhaled	After inhalation: fresh air. Call in physician.
In case of skin contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.
In case of eye contact	After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

#### 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**

No data available

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### **5. Fire fighting measures**

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#### **5.1 Extinguishing media**

Suitable extinguishing media Water Foam Carbon dioxide (CO<sub>2</sub>) Dry powder.

Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given.

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

Nature of decomposition products not known.

Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

#### **5.3 Advice for fire fighters**

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

#### **5.4 Additional information**

Suppress (knock down) gases/vapors/mists with a water spray jet. 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

For precautions see section 2.2.

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

#### Storage conditions

Tightly closed. Dry.

Moisture sensitive.

#### Storage class

Storage class (TRGS 510): 8A: Combustible, corrosive hazardous materials

### 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

### 8.2 Exposure controls

#### Personal protective equipment

Eye/face protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles.
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	protective clothing.
Respiratory protection	required when dusts are generated. 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. Recommended Filter type: Filter type P2.  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.



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	crystalline
Color	beige
Odor	No data available
pH value	No data available
Melting point/freezing point	Melting point/range: 244 - 247 °C - lit.
Initial boiling point and boiling range	No data available
Flash point	Not applicable
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	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

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.



## **10.2 Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature).

## **10.3 Possibility of hazardous reactions**

No data available

## **10.4 Conditions to avoid**

no information available

## **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	Oral: No data available Inhalation: No data available Dermal: 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	May cause respiratory irritation.
STOT-repeated exposure	No data available
Aspiration hazard	No data available

### **11.2 Additional information**

#### **Endocrine disrupting properties**

##### **Product** (Assessment):

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea.



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

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Endocrine disrupting properties

**Product** (Assessment):

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 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**

See [www.retrologistik.com](http://www.retrologistik.com) for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

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## 14. Transport information

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### 14.1 UN Number

ADR/RID: 3261

IMDG: 3261

IATA: 3261



#### **14.2 UN proper shipping name**

ADR/RID:	IMDG:	IATA:
CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.	Corrosive solid, acidic, organic, n.o.s.
(4,4'-[2,2,2-Trifluoro-1-(trifluoromethyl)ethylidene]diphthalic anhydride)	(4,4'-[2,2,2-Trifluoro-1-(trifluoromethyl)ethylidene]diphthalic anhydride)	(4,4'-[2,2,2-Trifluoro-1-(trifluoromethyl)ethylidene]diphthalic anhydride)

#### **14.3 Transport hazard class(es)**

ADR/RID: 8	IMDG: 8	IATA: 8
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#### **14.4 Packing group**

ADR/RID: II	IMDG: II	IATA: II
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#### **14.5 Environmental hazards**

ADR/RID: no	IMDG Marine pollutant: no	IATA: no
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#### **14.6 Special precautions for user**

Tunnel restriction code : (E)

Further information : 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.

#### **Other regulations**

Take note of Dir 94/33/EC on the protection of young people at work.

#### **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**

H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.



### **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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