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Safety data sheet according to Regulation (EC) No 1907/2006, Article 31

Printing date 18.11.2025 Version number 6 (replaces version 5) Revision: 18.11.2025

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· 1.1 Product identifier

· Creation date 23.03.2010

· Trade name: 1,1,1,3,3,3-hexafluoropropan-2-ol

· Article number: 0833

· CAS Number:

920-66-1 · **EC number:**

213-059-4

· Registration number

A registration number is not available for this substance as the substance or its uses are exempted from registration or the annual tonnage does not require a registration.

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

Only for the use of professionals users

· Life cycle stages IS Use at industrial Sites

· Sector of Use

SU9 Manufacture of fine chemicals

SU10 Formulation [mixing] of preparations and/or re-packaging (excluding alloys)

SU24 Scientific research and development

· Product category

PC20 Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents

PC21 Laboratory chemicals

PC29 Pharmaceuticals

PC40 Extraction agents

· Process category

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4 Chemical production where opportunity for exposure arises

PROC5 Mixing or blending in batch processes

PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)
PROC15 Use as laboratory reagent

· Environmental release category

ERC1 Manufacture of the substance

ERC2 Formulation into mixture

ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

ERC6a Use of intermediate

· Application of the substance / the mixture

Chemical for research, development, manufacturing, laboratory chemical for analysis.

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Biosolve Chimie

20 Rue Roger Husson, 57260 Dieuze, France

Tel: +33 3 878 675 80/81/82/83/84/85 Email: info@biosolvechimie.com

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Biosolve B.V.

Kerkhofstraat 21, 5554HG Valkenswaard, the Netherlands.

Tel: +31-(0)40-2071300 *Fax:*+31-(0)40-2048537

Email: info@biosolve-chemicals.com

- · Further information obtainable from: Product safety department.
- · 1.4 Emergency telephone number:

Contact list of appointed bodies for information relating to emergency health response, according to Art. 45(1) Reg. (EC) No 1272/2008.

See at https://poisoncentres.echa.europa.eu/appointed-bodies

 $Help\ desk:\ http://echa.europa.eu/web/guest/support/helpdesks/national-helpdesks/list-of-national-helpdesks.$

For more information see section 16.

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS08 health hazard

Repr. 2 H361 Suspected of damaging fertility or the unborn child.



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

· Hazard pictograms







GHS05 GHS07

GHS08

· Signal word Danger

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· Hazard statements

H302+H332 Harmful if swallowed or if inhaled.

H314 Causes severe skin burns and eye damage.

H361 Suspected of damaging fertility or the unborn child.

· Precautionary statements

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

water [or shower].

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/doctor.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· **PBT:** Not applicable. · **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.1 Substances
- · CAS No. Description

CAS: 920-66-1 1,1,1,3,3,3-hexafluoropropan-2-ol

- · Identification number(s)
- · EC number: 213-059-4

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing:

Call for a doctor immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

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

No further relevant information available.

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· 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · **Protective equipment:** Mouth respiratory protective device.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralising agent.

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep container tightly sealed.
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists valid during the making were used as basis.

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- · 8.2 Exposure controls
- Appropriate engineering controls No further data; see section 7.
- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Hand protection

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection

Safety glasses



Tightly sealed goggles

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information

Physical state
Colour:
Colourless
Odour:
Characteristic

· Odour threshold: No data available.

• Melting point/freezing point: -3.4 °C

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(Contd. of page 5) · Boiling point or initial boiling point and boiling 58.2 °C · Flammability Not applicable. · Lower and upper explosion limit · Lower: No data available No data available · Upper: · Flash point: >100 °C · Decomposition temperature: No data available No data available · Viscosity: Not determined. · Dynamic: ·Solubility Not determined. · water: · Partition coefficient n-octanol/water (log value) No data available · Vapour pressure at 30 °C: 266 hPa · Density and/or relative density · Density at 20 °C: $1.6 \, g/cm^3$ No data available · Relative density · Vapour density No data available · 9.2 Other information · Appearance: · Form: Liquid Important information on protection of health and environment, and on safety. No data available · Ignition temperature: Product does not present an explosion hazard. · Explosive properties: · Molecular weight 168.04 g/mol · Change in condition · Evaporation rate No data available · Information with regard to physical hazard classes · Explosives Void · Flammable gases Void Void · Aerosols · Oxidising gases Void · Gases under pressure Void · Flammable liquids Void · Flammable solids Void · Self-reactive substances and mixtures Void · Pyrophoric liquids Void · Pyrophoric solids Void · Self-heating substances and mixtures Void · Substances and mixtures, which emit flammable Void gases in contact with water · Oxidising liquids Void · Oxidising solids Void

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· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Harmful if swallowed or if inhaled.

· LD/LC50 values relevant for classification:		
Oral	LD50	600 mg/kg (mouse)
		1,500 mg/kg (rat)
Inhalative	LC50/4 h	13.8 mg/l (rat)

- Primary irritant effect:
- · Skin corrosion/irritation Causes severe skin burns and eye damage.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Suspected of damaging fertility or the unborn child.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.
- 11.2 Information on other hazards
- · Endocrine disrupting properties Substance is not listed.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.

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- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

- · 12.7 Other adverse effects
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue		
HP6	Acute Toxicity	
HP8	Corrosive	
HP10	Toxic for reproduction	

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

SECTION 14:	Transport in	formation

· 14.1 UN number or ID number · ADR, IMDG, IATA	UN1760
· 14.2 UN proper shipping name · ADR	UN1760 CORROSIVE LIQUID, N.O.S. (1,1,1,3,3,3-hexafluoropropan-2-ol)
· IMDG, IATA	CORROSIVE LIQUID, N.O.S. (1,1,1,3,3,3-hexafluoropropan-2-ol)

- · 14.3 Transport hazard class(es)
- $\cdot ADR$



• Class 8 (C9) Corrosive substances.

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(Contd. of page 8) 8 · Label · IMDG, IATA · Class 8 Corrosive substances. · Label · 14.4 Packing group · ADR, IMDG, IATA II· 14.5 Environmental hazards: · Marine pollutant: No 14.6 Special precautions for user Warning: Corrosive substances. · Hazard identification number (Kemler code): · EMS Number: F-A,S-B· Stowage Category · Stowage Code SW2 Clear of living quarters. · 14.7 Maritime transport in bulk according to IMO instruments Not applicable. · Transport/Additional information: · Limited quantities (LQ) 1L· Excepted quantities (EQ) Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml · Transport category 2 E · Tunnel restriction code

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I Substance is not listed.
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

Substance is not listed.

- · REGULATION (EU) 2019/1148
- · Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

Substance is not listed.

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- · Annex II REPORTABLE EXPLOSIVES PRECURSORS Substance is not listed.
- Regulation (EC) No 273/2004 on drug precursors Substance is not listed.
- Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

 Substance is not listed.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Product safety department
- · Contact:

Austria Vergiftungsinformationszentrale (VIZ) (+43) 1 406 43 43

Belgium Centre Antipoisons (+32) 070 245 245 Antigifcentrum 070 245 245 (+32)

Bulgaria Национален токсикологичен информационен център Многопрофилна болница за активно лечение и спешна медицина "Н.И.Пирогов" (+359) 2 9154 233

Croatia Centar za kontrolu otrovanja (+385) 01 2348 342

Cyprus Υπουργείο Εργασίας, Πρόνοιας και Κοινωνικών Ασφαλίσεων Τμήμα Επιθεώρησης Εργασίας 1401

Czech Republic Toxikologické informační středisko (+420) 224 919 293, +(420) 224 915 402

Denmark Giftlinjen: +45 8212 1212

Estonia Terviseameti mürgistusteabekeskuse 16662, (+372) 7943 794

Finland Myrkytystietokeskus 0800 147 111, 09 471 977

France ORFILA (INRS) : + 33 (0)1 45 42 59 59 Centres Antipoison et de Toxicovigilance

ANGERS: 02 41 48 21 21 BORDEAUX: 05 56 96 40 80 LILLE: 0800 59 59 59 LYON: 04 72 11 69 11 MARSEILLE: 04 91 75 25 25 NANCY: 03 83 22 50 50 PARIS: 01 40 05 48 48

STRASBOURG: 03 88 37 37 37 TOULOUSE: 05 61 77 74 47

Germany Giftnotruf der Charité, Berlin: 030/19240

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Giftinformationszentrum-Nord der Länder Bremen, Hamburg, Niedersachsen und Schleswig-Holstein (GIZ-Nord):0551/19 240

Informationszentrale gegen Vergiftungen Zentrum für Kinderheilkunde Universitätsklinikum Bonn: 0228/19240

Giftnotruf Erfurt Gemeinsames Giftinformationszentrum der Länder Mecklenburg-Vorpommern, Sachsen, Sachsen-Anhalt und Thüringen: 0361/730 730

Informations- und Beratungszentrum für Vergiftungsfälle Klinik für Kinder- und Jugendmedizin Universitätsklinikum des Saarlandes: 06841/19240

Giftinformationszentrum der Länder Rheinland-Pfalz und Hessen - Klinische Toxikologie -Universitätsmedizin der Johannes Gutenberg-Universität Mainz: 06131/19240

Vergiftungs-Informations-Zentrale Zentrum für Kinder- und Jugendmedizin Universitätsklinikum:

Giftnotruf München Toxikologische Abteilung der II. Med. Klinik und Poliklinik: 089/19240

Great Britain Members of the public seeking specific information on poisons should contact: In England and Wales: NHS 111 - dial 111 In Scotland: NHS 24 - dial 111

Greece Κέντρο Δηλητηριάσεων (+30) 2107793777

Hungary Országos Kémiai Biztonsági Intézet (OKBI) +(36)-80-201-199

Iceland LANDSPITALI - THE NATIONAL UNIVERSITY HOSPITAL Tel. (+354) 543 1000

Ireland National Poisons Information Centre: +353 (1) 809 2166 (8.00 a.m. to 10.00 p.m. 7 days a week) Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

Italy Istituto Superiore di Sanità (ISS) +390649906140

CAV "Ospedale Pediatrico Bambino Gesù" – Roma Tel. (+39) 06.6859.3726

CAV "Azienda Ospedaliera Università di Foggia" – Foggia Tel. 800.183.459

CAV "Azienda Ospedaliera A. Cardarelli" – Napoli Tel. (+39) 081.545.3333

CAV Policlinico "Umberto I" – Roma Tel. (+39) 06.4997.8000 CAV Policlinico "A. Gemelli" – Roma Tel. (+39) 06.305.4343

CAV Azienda Ospedaliera "Careggi" U.O. Tossicologia Medica – Firenze Tel. (+39) 055.794.7819

CAV Centro Nazionale di Informazione Tossicologica – Pavia Tel. (+39) 0382.24.444

CAV Ospedale Niguarda – Milano Tel. (+39) 02.66.1010.29

CAV Azienda Ospedaliera Papa Giovanni XXIII – Bergamo Tel. 800.88.33.00

CAV Centro antiveleni Veneto – Verona Tel. 800.011.858

Latvia Latvijas Vides, ģeoloģijas un meteoroloģijas centrs (+371) 67032600

Lithuania Apsinuodijimų informacijos biuras +370 (5) 2362052

Luxembourg Antigifcentrum / Centre antipoisons (+352) 8002 5500

The Netherlands Nationaal Vergiftigingen Informatie +31 (0)88 755 8000

Norway Giftinformasjonen 22 59 13 00



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Poland Biuro do spraw Substancji Chemicznych +48 42 2538 400

Portugal Centro de informação antivenenos 800 250 250

Romania Institutul Național de Sănătate Publică +40213183606

Slovakia Národné toxikologické informačné centrum (NTIC) (+421) 2 5477 4166

Slovenia Urad Republike Slovenije za kemikalije +38614006051

Spain Instituto Nacional de Toxicología y Ciencias Forenses (INTCF) (+34) 91 562 04 20

Sweden Giftinformationscentralen (+46) 10 456 6700

Switzerland Tox Info Suisse 24-h-Notfallnummer: 145 (aus dem Ausland: +41 44 251 51 51) Auskunft: +41 44 251 66 66

- Date of previous version: 04.11.2025
- Version number of previous version: 5
- · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity - Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Repr. 2: Reproductive toxicity – Category 2

* * Data compared to the previous version altered.

EU