

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.12.2023

Version number 5 (replaces version 4)

Revision: 12.07.2023

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

· **1.1 Product identifier**

· **Trade name:** caesium chloride

· **Article number:** 0353

· **CAS Number:**

7647-17-8

· **EC number:**

231-600-2

· **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

Biosolve B.V.

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.12.2023

Version number 5 (replaces version 4)

Revision: 12.07.2023

Trade name: caesium chloride

(Contd. of page 1)

Leenderweg 78, 5555 CE 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 below section 16 or at <https://poisoncentres.echa.europa.eu/home>.
Help desk: <http://echa.europa.eu/web/guest/support/helpdesks/national-helpdesks/list-of-national-helpdesks>.
Data from: ECHA - EUROPEAN CHEMICALS AGENCY
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**



GHS07

Acute Tox. 4 H312 Harmful in contact with skin.

- **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**



GHS07

- **Signal word** Warning
- **Hazard statements**
H312 Harmful in contact with skin.
- **Precautionary statements**
P280 Wear protective gloves / protective clothing.
P302+P352 IF ON SKIN: Wash with plenty of water.
P312 Call a POISON CENTER/doctor if you feel unwell.
P362+P364 Take off contaminated clothing and wash it before reuse.
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.

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.12.2023

Version number 5 (replaces version 4)

Revision: 12.07.2023

Trade name: caesium chloride

· **vPvB:** Not applicable.

(Contd. of page 2)

SECTION 3: Composition/information on ingredients

- **3.1 Substances**
- **CAS No. Description**
CAS: 7647-17-8 caesium chloride
- **Identification number(s)**
- **EC number:** 231-600-2

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**
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; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **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:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** *Not required.*
- **6.2 Environmental precautions:** *Do not allow to enter sewers/ surface or ground water.*
- **6.3 Methods and material for containment and cleaning up:** *Pick up mechanically.*
- **6.4 Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.12.2023

Version number 5 (replaces version 4)

Revision: 12.07.2023

Trade name: caesium chloride

See Section 13 for disposal information.

(Contd. of page 3)

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special precautions are necessary if used correctly.
- **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:** None.
- **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.
- **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:**
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not required.
- **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.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.12.2023

Version number 5 (replaces version 4)

Revision: 12.07.2023

Trade name: caesium chloride

(Contd. of page 4)

· **Eye/face protection** Not required.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· Physical state	Solid
· Colour:	Colourless
· Odour:	Characteristic
· Odour threshold:	No data available.
· Melting point/freezing point:	646 °C
· Boiling point or initial boiling point and boiling range	1,290 °C
· Flammability	Product is not flammable.
· Lower and upper explosion limit	
· Lower:	No data available
· Upper:	No data available
· Flash point:	Not applicable.
· Decomposition temperature:	No data available
· pH	Not applicable.
· Viscosity:	
· Dynamic:	Not applicable.
· Solubility	
· water at 20 °C:	1800 g/l
· Partition coefficient n-octanol/water (log value)	No data available
· Vapour pressure:	Not applicable.
· Density and/or relative density	
· Density at 20 °C:	3.89 g/cm ³
· Relative density	No data available
· Bulk density:	1,800 kg/m ³
· Vapour density	Not applicable.
· Particle characteristics	
·	See section 3.

· **9.2 Other information**

· Appearance:	
· Form:	Solid
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	No data available
· Explosive properties:	Product does not present an explosion hazard.
· Molecular weight	168.36 g/mol
· Change in condition	
· Evaporation rate	Not applicable.

· **Information with regard to physical hazard classes**

· Explosives	Void
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(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.12.2023

Version number 5 (replaces version 4)

Revision: 12.07.2023

Trade name: caesium chloride

(Contd. of page 5)

- **Flammable gases** Void
- **Aerosols** Void
- **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 gases in contact with water** Void
- **Oxidising liquids** Void
- **Oxidising solids** Void
- **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 in contact with skin.

LD/LC50 values relevant for classification:

Oral	LD50	2,600 mg/kg (rat)
Dermal	LD50	1,500 mg/kg (rat)

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **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** Based on available data, the classification criteria are not met.
- **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.

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.12.2023

Version number 5 (replaces version 4)

Revision: 12.07.2023

Trade name: caesium chloride

(Contd. of page 6)

- **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.
- **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) (Assessment by list): slightly hazardous for water
- Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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
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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- **14.1 UN number or ID number**
- **ADR, ADN, IMDG, IATA** Void
- **14.2 UN proper shipping name**
- **ADR, ADN, IMDG, IATA** Void

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.12.2023

Version number 5 (replaces version 4)

Revision: 12.07.2023

Trade name: caesium chloride

(Contd. of page 7)

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|---------------------------------------------------------------------------------------------|-----------------|
| · 14.3 Transport hazard class(es)
· ADR, ADN, IMDG, IATA
· Class | Void |
| · 14.4 Packing group
· ADR, IMDG, IATA | Void |
| · 14.5 Environmental hazards:
· Marine pollutant: | No |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Maritime transport in bulk according to IMO instruments | Not applicable. |

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.
- **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.
- **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 German Vergiftungsinformationszentrale 01 406 43 43 <http://www.goeg.at/de/VIZ>
Belgium French Centre antipoison 070 245 245 <http://www.centreantipoisons.be>
Dutch Antigif centrum 070 245 245 <http://www.antigifcentrum.be>
German Giftinformationszentrum 070 245 245 <http://www.poisoncentre.be>
Bulgaria* Bulgarian Токсикологични центрове 02 9154 411 <https://pirogov.eu/bg>
Croatia* Croatian Centar za kontrolu otrovanja +385 1 2348 342 <https://www.imi.hr/en/jedinica/poison->

(Contd. on page 9)

Safety data sheet
according to 1907/2006/EC, Article 31

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Version number 5 (replaces version 4)

Revision: 12.07.2023

Trade name: caesium chloride

(Contd. of page 8)

control-centre

Czech Rep Czech Toxikologické informační středisko +420 224 91 92 93; +420 224 91 54 02 <http://www.tis-cz.cz>

Denmark Danish Giftlinien +45 8212 1212 <https://www.bispebjerghospital.dk/giftlinien>

Estonia Estonian Mürgistusteabekeskus 16662; +372 7943 794 <https://www.16662.ee>

Finland Finnish Myrkytystietokeskus 0800 147 111; +358 9 471 977 <http://www.hus.fi/sairaanhoito/sairaanhoitopalvelut/myrkytystietokeskus/Sivut/default.aspx>

France French Angers +33 2 41 48 21 21 <http://www.centres-antipoison.net/angers/index.html>

Bordeaux +33 5 56 96 40 80 <http://www.centres-antipoison.net/bordeaux/index.html>

Lille +33 0800 59 59 59 <http://www.centres-antipoison.net/lille/index.html>

Lyon +33 4 72 11 69 11 <http://www.centres-antipoison.net/lyon/index.html>

Marseille +33 4 91 75 25 25 <http://www.centres-antipoison.net/marseille/index.html>

Nancy +33 3 83 22 50 50 <http://www.centres-antipoison.net/nancy/index.html>

Paris +33 1 40 05 48 48 <http://www.centres-antipoison.net/paris/index.html>

Strasbourg +33 3 88 37 37 37 <http://www.centres-antipoison.net/strasbourg/index.html>

Toulouse +33 5 61 77 74 47 <http://www.centres-antipoison.net/toulouse/index.html>

Germany German Berlin +49 30 19240 <https://giftnotruf.charite.de>

Bonn +49 228 19240 <http://www.gizbonn.de/index.php?id=272>

Erfurt +49 361 730730 <https://www.ggiz-erfurt.de/home.html>

Freiburg +49 761 19240 <https://www.uniklinik-freiburg.de/giftberatung.html>

Göttingen +49 551 19240 <https://www.giz-nord.de/cms/index.php>

Homburg/Saar +49 6841 19240 http://www.uniklinikumsaarland.de/de/einrichtungen/kliniken_institute/kinder_und_jugendmedizin/informations_und_behandlungszentrum_fuer_vergiftungen_des_saarlandes

Mainz +49 6131 19240 <http://www.giftinfo.uni-mainz.de/index.php?id=24807>

München +49 89 19240 <http://www.toxinfo.med.tum.de>

Greece Greek κέντρο δηλητηριάσεων +30 213 200 9000 <http://www.aglaiakyriakou.gr/>; <http://0317.syzefxis.gov.gr>

Hungary Hungarian Egészségügyi Toxikológiai Tájékoztató Szolgálat +36 6 80 20 11 99; +36 06 1 476 6464 <http://www.okbi.hu/page.php?trid=1&dz=103>

Italy Italian Bergamo +39 800 88 33 00 http://www.asst-pg23.it/section/259/Tossicologia_-_Centro_antiveneni

Firenze +39 55 794 78 19 <http://www.antiveneni.altervista.org>

Milano +39 2 661 01 029 <http://www.centroantiveneni.org>

Pavia +39 382 244 44 <http://www-3.unipv.it/reumatologia-tossicologia/cav>

Napoli +39 81 747 28 70

Foggia +39 881 732 326

Roma +39 6 685 93 726 / +39 6 499 78 000 / +39 6 305 43 43 <http://www.corso-primo-soccorso-roma.it/centri/antiveneno-lazio.html>

Ireland English Poisons information Centre of Ireland +353 1 809 21 66 <http://www.poisons.ie/Public>

Latvia* Latvian Saindēšanās informācijas centri +371 670 00 610 <https://www.aslimnica.lv/lv>

Russian Ламбрия +371 67000610 <https://www.aslimnica.lv/lv>

Lithuania Lithuanian Apsinuodijimų informacijos biuras + 370 5 236 20 52 <http://www.apsinuodijau.lt>

Luxembourg German Giftinformationszentrum +49 800 255 00 <http://www.poisoncentre.be>

French Centre antipoison +352 800 255 00 <http://www.centreantipoisons.be>

Netherlands Dutch 31 (0)88 755 8 <https://www.productnotificatie.nl>

Norway Norwegian Giftinformasjonen +47 22 59 13 00 <https://helsenorge.no/Giftinformasjon>

Poland Polish Kraków +48 12 411 99 99 <http://www.oit.cm.uj.edu.pl>

(Contd. on page 10)

Safety data sheet
according to 1907/2006/EC, Article 31

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Version number 5 (replaces version 4)

Revision: 12.07.2023

Trade name: caesium chloride

(Contd. of page 9)

Gdansk +48 58 682 04 04 <http://www.pctox.pl/news.php>

Poznań +48 61 847 69 46 http://www.raszeja.poznan.pl/oddzialy/oddzial_toksykologiczny

Warszawa +48 607 218 174 okzit@burdpi.pol.pl

Portugal Portuguese Centro de Informação Antivenenos +351 808 250 143 <http://www.inem.pt>

Romania Romanian CNMRMC +40 213 183 606 infotox@insp.gov.ro

Spitalul Clinic de Urgenta Bucuresti +40 215 992 300 int. 291
spital@urgentaflorasca.ro

Spitalul Clinic Judetean de Urgenta Targu Mures +40 265.212.111

secretariat@spitjudms.ro

Russia Russian Горячая линия Министерства здравоохранения +7 495 628 4453; +7 495 627 2944
<http://rospotrebnadzor.ru>

Serbia Serbian Nacionalni centar za kontrolu trovanja +381 11 3608 440 <http://www.vma.mod.gov.rs/sr-lat/specijalnosti/centri/nacionalni-centar-za-kontrolu-trovanja>

Slovak Rep Slovak Národné toxikologické informačné centrum +421 2 5477 4166 <http://www.ntic.sk>

Spain Spanish Servicio de Información Toxicológica +34 91 562 04 20 https://www.administraciondejusticia.gob.es/paj/pub_lico/ciudadano/informacion_institucional/organismos/instituto_nacional_de_toxicologia_y_ciencias_fo_renses/servicios/info_toxicologica/que_es_sit/ut/p/c5/04_SB8K8xLLM9MSSzPy8xBz9CP0os3g_A1cjCydDRwMDUwNLA08nwzAvM0czA_8gM6B8pFm8mae_rqWdQsImJcaiLiYGncViYa4CHR4GBiQExug1wAEdCusNBrsWpwsLUACKPy3WuRvjlg83wy5sQ0G8CtR-P_w88nNT9QtYQyMMmj0zA9IVFQH Y 1 8 l 4 / d l 3 / d 3 / L2dJQSEvUUt3QS9ZQnZ3LzZfTjBFMjhCMUEwMDUwOTBJQjFWSjZBNjBPTjA!/?itemId=45381

Sweden Swedish Giftinformationscentralen +46 10 456 6700 <https://giftinformation.se>

Switzerland German Giftinformationszentrum 145 <http://toxinfo.ch>

French Centre antipoison 145 <http://toxinfo.ch>

Italian Centro Antiveneni 145 <http://toxinfo.ch>

United Kingdom English NHS Helpline 111 NHS Helpline - England and Wales: <http://www.nhs.uk/NHSEngland/AboutNHSServices/Emergencyandurgentcareservices/Pages/NHS-111.aspx>

· **Date of previous version:** 19.10.2022

· **Version number of previous version:** 4

· **Abbreviations and acronyms:**

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

· *** Data compared to the previous version altered.**