

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

Printing date 12.07.2023

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:** Polysorbate 20

· **Chemical Identification:**

TWEEN® 20

Polyethylene glycol sorbitan monolaurate

Polyoxyethylene (20) sorbitan monolaurate

Sorbitan monododecanoate, poly(oxy-1,2-ethanediyl) derivs.

Tween 20

PEG-10 sorbitan laurate

Polysorbate 21

Sorbitan monolaurate, ethoxylated

· **Article number:** 2045

· **CAS Number:**

9005-64-5

· **NLP Number:**

500-018-3

· **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**

No further relevant information available.

· **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.

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.

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SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The substance is not classified, according to the CLP regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **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: 9005-64-5 Polysorbate 20
- **Identification number(s)**
- **NLP Number:** 500-018-3

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** No special measures required.
- **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.

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- **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:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **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.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special measures required.
- **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:**
The usual precautionary measures are to be adhered to when handling chemicals.
- **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.
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

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- **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** Goggles recommended during refilling

SECTION 9: Physical and chemical properties

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

· **General Information**

- **Physical state** Fluid
- **Colour:** Colorless to slightly yellow.
- **Odour:** Odourless
- **Odour threshold:** No data available.
- **Melting point/freezing point:** No data available.
- **Boiling point or initial boiling point and boiling range** >100 °C
- **Flammability** Not applicable.
- **Lower and upper explosion limit**
- **Lower:** No data available
- **Upper:** No data available
- **Flash point:** >149 °C
- **Decomposition temperature:** No data available
- **pH** 6-8
- **Viscosity:**
- **Dynamic at 20 °C:** ~400 mPas
- **Solubility**
- **water:** Not determined.
- **Partition coefficient n-octanol/water (log value)** No data available
- **Vapour pressure at 20 °C:** <1.4 hPa
- **Density and/or relative density**
- **Density at 20 °C:** 1.1 g/cm³
- **Relative density** No data available
- **Vapour density** No data available

· **9.2 Other information**

- **Appearance:**
- **Form:** Viscous
- **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.
- **Change in condition**
- **Evaporation rate** No data available

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- **Information with regard to physical hazard classes**
- **Explosives** Void
- **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** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**

Oral	LD50	38,900 mg/kg (rat)
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- **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.

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- **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.
- **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** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

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 |
| · 14.3 Transport hazard class(es)
· ADR, ADN, IMDG, IATA
· Class | Void |

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· 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-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>

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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 Латвия +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>
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>

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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

secretariat@spitjudms.ro

Spitalul Clinic Judetean de Urgenta Targu Mures +40 265.212.111

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/publico/ciudadano/informacion_institucional/organismos/instituto_nacional_de_toxicologia_y_ciencias_fo/renses/servicios/info_toxicologica/que_es_sit/ut/p/c5/04_SB8K8xLLM9MSSzPy8xBz9CP0os3g_A1cjCydDRwMDUwNLA08nwzAvM0czA_8gM6B8pFm8maeqrWdQsImJcaiLiYGncViYa4CHR4GBiQExugIwAEdCusNBrsWpwsLUACKPy3WuRvjlg83wy5sQ0G8CtR-P__w88nNT9QtYQyMMMMj0zA9IVFQH Y 1 8 1 4 / d 1 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 Antiveleni 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

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