

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

Printing date 18.10.2022

Version number 3

Revision: 18.10.2022

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

· **1.1 Product identifier**

· **Trade name:** 4-(2-hydroxyethyl)piperazin-1-ylethanesulphonic acid;
HEPES free acid

· **Article number:** 0804

· **EC number:**
230-907-9

· **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.

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.*

(Contd. on page 2)

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· **vPvB:** Not applicable.

(Contd. of page 1)

SECTION 3: Composition/information on ingredients

- **3.1 Chemical characterisation: Substances**
- **CAS No. Description**
4-(2-hydroxyethyl)piperazin-1-ylethanesulphonic acid;
HEPES free acid
- **Identification number(s)**
- **EC number:** 230-907-9

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.
- **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.
See Section 13 for disposal information.

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(Contd. on page 3)

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(Contd. of page 2)

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**
- **Additional information about design of technical facilities:** No further data; see item 7.
- **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**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:** Not required.
- **Protection of hands:**
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
- **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 protection:** Not required.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
- **Form:** Solid material
- **Colour:** White
- **Odour:** Characteristic
- **Odour threshold:** No data available.

(Contd. on page 4)

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(Contd. of page 3)

· pH-value:	5-6.5
· Change in condition	
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	Undetermined.
· Flash point:	Not applicable.
· Flammability (solid, gas):	Product is not flammable.
· Decomposition temperature:	No data available
· Auto-ignition temperature:	No data available
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	No data available
Upper:	No data available
· Vapour pressure:	Not applicable.
· Density:	Not determined.
· Relative density	No data available
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with water:	Soluble.
· Partition coefficient: n-octanol/water:	No data available
· Viscosity:	
Dynamic:	Not applicable.
· 9.2 Other information	No further relevant information available.

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 toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

(Contd. on page 5)

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(Contd. of page 4)

- **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.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **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.

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.
- **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.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

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.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- | | |
|---------------------------------------|------|
| · 14.1 UN-Number | |
| · ADR, ADN, IMDG, IATA | Void |
| · 14.2 UN proper shipping name | |
| · ADR, ADN, IMDG, IATA | Void |

(Contd. on page 6)

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(Contd. of page 5)

- | | |
|--|-----------------|
| · 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 Transport in bulk according to Annex II of Marpol and the IBC Code | 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://>

(Contd. on page 7)

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(Contd. of page 6)

www.tis-cz.cz

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

 Estonia Estonian Mürgistustetakeskus 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>

(Contd. on page 8)

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(Contd. of page 7)

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_A1cjCyd□DRwMDUwNLA08nwzAvM0czA_8gM6B8pFm8mae□r□WdQsImJcaiLiYGncViYa4CHr4GBiQExuglwAEd□CusNBrsWpwsLUACKPy3WuRvjlg83wy5sQ0G8C□tR-P__w88nNT9QtyQyMMmj0zA9IVFQH Y 1 8 1 4 / d 1 3 / d 3 / L2dJQSEvUUt3QS9ZQnZ3LzZfTjBFMjhCMUEwMDUwOT□BJQjFWSjZBNjBPTJA!/?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

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)

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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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