

Safety Data Sheets

According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS) - Sixth revised edition

Version: 1.0
Creation Date: Aug 15, 2017
Revision Date: Aug 15, 2017

1. Identification

1.1 GHS Product identifier

Product name (2R)-2-amino-5-phosphonopentanoic acid

1.2 Other means of identification

Product number -
Other names D(-)-2-Amino-5-phosphonopentanoic acid

1.3 Recommended use of the chemical and restrictions on use

Identified uses For industry use only.
Uses advised against no data available

1.4 Supplier's details

Company Echemi.com
Address Echemi.com
Telephone Echemi.com
Fax Echemi.com

1.5 Emergency phone number

Emergency phone number Echemi.com
Service hours Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

2. Hazard identification

2.1 Classification of the substance or mixture

Skin irritation, Category 2
Eye irritation, Category 2
Specific target organ toxicity – single exposure, Category 3

2.2 GHS label elements, including precautionary statements

Pictogram(s)



Signal word Warning
Hazard statement(s) H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation

Precautionary statement(s)
Prevention P264 Wash ... thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P271 Use only outdoors or in a well-ventilated area.
Response P302+P352 IF ON SKIN: Wash with plenty of water/...
P321 Specific treatment (see ... on this label).
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 Call a POISON CENTER/doctor/...if you feel unwell.
Storage P403+P233 Store in a well-ventilated place. Keep container tightly closed.
Disposal P405 Store locked up.
P501 Dispose of contents/container to ...

2.3 Other hazards which do not result in classification

none

3. Composition/information on ingredients

3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
(2R)-2-amino-5-phosphonopentanoic acid	(2R)-2-amino-5-phosphonopentanoic acid	79055-68-8	none	100%

4. First-aid measures

4.1 Description of necessary first-aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.		
4.2 Most important symptoms/effects, acute and delayed		
no data available		
4.3 Indication of immediate medical attention and special treatment needed, if necessary		
no data available		
5.Fire-fighting measures		
5.1 Extinguishing media		
Suitable extinguishing media		
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.		
5.2 Specific hazards arising from the chemical		
no data available		
5.3 Special protective actions for fire-fighters		
Wear self-contained breathing apparatus for firefighting if necessary.		
6.Accidental release measures		
6.1 Personal precautions, protective equipment and emergency procedures		
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.		
6.2 Environmental precautions		
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.		
6.3 Methods and materials for containment and cleaning up		
Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal.		
7.Handling and storage		
7.1 Precautions for safe handling		
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use.Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.		
7.2 Conditions for safe storage, including any incompatibilities		
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.		
8.Exposure controls/personal protection		
8.1 Control parameters		
Occupational Exposure limit values		
no data available		
Biological limit values		
no data available		
8.2 Appropriate engineering controls		
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.		
8.3 Individual protection measures, such as personal protective equipment (PPE)		
Eye/face protection		
Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).		
Skin protection		
Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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.		
Respiratory protection		
Wear dust mask when handling large quantities.		
Thermal hazards		
no data available		
9.Physical and chemical properties		
Physical state		
white fine crystalline powder		
Colour		
no data available		
Odour		
no data available		
Melting point/ freezing point		
no data available		
Boiling point or initial boiling point and boiling range		
482.1°C at 760 mmHg		
Flammability		
no data available		
Lower and upper explosion limit / flammability limit		
no data available		
Flash point		
245.4°C		
Auto-ignition temperature		
no data available		
Decomposition temperature		
no data available		
pH		
no data available		
Kinematic viscosity		
no data available		
Solubility		
no data available		
Partition coefficient n-octanol/water (log value)		
no data available		
Vapour pressure		
no data available		
Density and/or relative density		
1.529 g/cm3		
Relative vapour density		
no data available		
Particle characteristics		
no data available		
10.Stability and reactivity		

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

no data available

10.6 Hazardous decomposition products

no data available

11.Toxicological information

Acute toxicity

- Oral: no data available
- Inhalation: no data available
- Dermal: no data available

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT-single exposure

no data available

STOT-repeated exposure

no data available

Aspiration hazard

no data available

12.Ecological information

12.1 Toxicity

- Toxicity to fish: no data available
- Toxicity to daphnia and other aquatic invertebrates: no data available
- Toxicity to algae: no data available
- Toxicity to microorganisms: no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Other adverse effects

no data available

13.Disposal considerations

13.1 Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14.Transport information

14.1 UN Number

ADR/RID: no data available

IMDG: no data available

IATA: no data available

14.2 UN Proper Shipping Name

ADR/RID: no data available
IMDG: no data available
IATA: no data available

14.3 Transport hazard class(es)

ADR/RID: no data available

IMDG: no data available

IATA: no data available

14.4 Packing group, if applicable

ADR/RID: no data available

IMDG: no data available

IATA: no data available

14.5 Environmental hazards

ADR/RID: no

IMDG: no

IATA: no

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

15. Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
(2R)-2-amino-5-phosphonopentanoic acid	(2R)-2-amino-5-phosphonopentanoic acid	79055-68-8	none
European Inventory of Existing Commercial Chemical Substances (EINECS)			Not Listed.
EC Inventory			Not Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Not Listed.
China Catalog of Hazardous chemicals 2015			Not Listed.
New Zealand Inventory of Chemicals (NZIoC)			Not Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Not Listed.
Vietnam National Chemical Inventory			Not Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Not Listed.

16. Other information

Information on revision

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Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

References

- IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>
- HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>
- IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>
- eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en
- CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>
- ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>
- ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>
- Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>
- ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.