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

1.1 Product identifier

Trade name: 6-PHOSPHOGLUCONIC ACID TRISODIUM SALT DIHYDRATE ≥98 %, for biochemistry

Article number: 4167

CAS Number: 57775-17-4

Registration number

A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

No further relevant information available.

Application of the substance / the preparation

Laboratory chemical

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:
Carl Roth GmbH + Co. KG
Schoemperlenstraße 3-5
76185 Karlsruhe
Germany
Telefon: +49/(0)721 5606-0   Telefax: +49/(0)721 5606-149      E-Mail: sicherheit@carlroth.de

Further information obtainable from: Department Health, Safety and Environment

1.4 Emergency telephone number:
Poison Centre Munich      Telefon +49/(0)89 19240

2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin Irrit. 2   H315  Causes skin irritation.

Eye Irrit. 2   H319  Causes serious eye irritation.

STOT SE 3   H335  May cause respiratory irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and 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

(Contd. on page 2)
Hazard statements
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary statements
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.

Additional information: Void

2.3 Other hazards
All chemicals are potentially dangerous. They should only be handled by specially trained personnel.

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients
3.1 Chemical characterization: Substances
CAS No. Description
57775-17-4 6-Phosphogluconic acid trisodium salt dihydrate

Identification number(s)
Formula: C₆H₁₄O₁₂PNa₃
Molar mass [g/mol]: 378,11

4 First aid measures

4.1 Description of first aid measures
General information:
Remove any clothing soiled by the product.

After inhalation:
Supply fresh air; if there is any trouble seek medical help.

After skin contact:
Wash with water and soap.
If there is any trouble seek medical help.

After eye contact:
Rinse opened eye for 10 minutes under running water. If symptoms persist, consult a doctor.

After swallowing:
Rinse out mouth and then drink water.
If there is any trouble seek medical help.

4.2 Most important symptoms and effects, both acute and delayed
Irritations
Coughing
5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: CO₂, powder, foam or water spray.

For safety reasons unsuitable extinguishing agents:
For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:
Phosporus oxides.
Carbon monoxide and carbon dioxide

5.3 Advice for firefighters

Protective equipment:
Wear self-contained respirator protective device.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with the eyes and skin.
Do not breathe dust.

6.2 Environmental precautions

Do not allow product to reach sewage system or any water course.

6.3 Methods and material for containment and cleaning up

Pick up mechanically.
Dispose of the material collected according to regulations.

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.

7 Handling and storage

7.1 Precautions for safe handling

Prevent formation of dust.

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:
Store in a cool location.

Information about storage in one common storage facility:
Store away from foodstuffs.

Further information about storage conditions:
Keep container tightly sealed.
7.3 Specific end use(s)
No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical facilities:
No further data; see item 7.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace: Not required.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals.
Avoid contact with the eyes and skin.
Wash hands before breaks and at the end of work.

Individual protection measures
Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Respiratory protection:

When dusts are generated: protective device filter P1.

Protection of hands:

Protective gloves

Material of gloves
Nitrile, thickness: ≥ 0.11 mm
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:
9 Physical and chemical properties

9.1 Information on basic physical and chemical properties
General Information
Appearance: Powder
Colour: white to yellowish
Odour: Odourless
Odour threshold: No information available.

pH-value: No information available.

Change in condition
Melting point/Melting range: No information available.
Boiling point/Boiling range: No information available.

Flash point: No information available
Flammability (solid, gaseous): No information available
Ignition temperature: No information available
Decomposition temperature: No information available
Self-igniting: No information available
Danger of explosion: No information available

Explosion limits:
Lower: No information available.
Upper: No information available.
Oxidizing properties: No information available.

Vapour pressure:
Density: No information available.
Relative density: No Information available.
Vapour density: No information available
Evaporation rate: No information available

Solubility in / Miscibility with water at 20 °C: 50 g/l
Partition coefficient (n-octanol/water): No information available

9.2 Other information
No further relevant information available.

10 Stability and reactivity

10.1 Reactivity
See section 10.3
10.2 Chemical stability
Thermal decomposition / conditions to be avoided:
No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions
Strong reaction possible with:
- Strong bases
- Strong oxidizing agents

10.4 Conditions to avoid
Avoid contact with moisture.

10.5 Incompatible materials:
No information available.

10.6 Hazardous decomposition products:
In case of fire: see item 5.

11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity:
LD/LC50 values relevant for classification:
Specific symptoms in biological assay:
No information available.

Primary irritant effect:
on the skin:
Slight irritations.
on the eye:
Irritating effect.
after inhalation:
Intensive contact with dusts may lead to irritations of the respiratory tract.

Sensitization:
No sensitizing effects known.

CMR effects:
Germ cell mutagenicity:
No information available.
Carcinogenicity:
No information available.
Reproductive toxicity:
No information available.

Aspiration hazard:
No aspiration toxicity classification.

Specific target organ toxicity - single exposure: May cause respiratory irritation.
Specific target organ toxicity - repeated exposure:
The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.2 Further information:
The product should be handled with the care usual when dealing with chemicals.
12 Ecological information

12.1 Toxicity
Aquatic toxicity:
Quantitative data on the ecological effect of this product are not 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.

Ecotoxic effects:
Remark:
Do not allow to enter waters, waste water, or soil!

12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

12.6 Other adverse effects
No further relevant information available.

13 Disposal considerations

13.1 Waste treatment methods
Recommendation
The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.

Uncleaned packaging:
Recommendation:
Disposal according to official regulations.

14 Transport information

14.1 UN-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

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 MARPOL73/78 and the IBC Code
Not applicable.

Transport/Additional information:

ADR
Remarks: Not subject to transport regulations.

UN "Model Regulation": -

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations:
Information about limitation of use: Employment restrictions concerning juveniles must be observed.

Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

15.2 Chemical safety assessment
A Chemical Safety Assessment has not been carried out.

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 MSDS: Department: Health, Safety and Environment

Contact: Frau Weckemann

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 Organization
ADR: Accord européen sur le transport 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 Harmonized System of Classification and Labelling of Chemicals
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
LD50*: Lethal Dose, 50 percent (Not relevant for classification)
LD50*: Lethal Concentration, 50 percent (Not relevant for classification)

* Data compared to the previous version altered.