

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

revised on: 27.10.2023

Version number 8 (replaces version 7)

Creation Date: 21.07.2016

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name:** Disodium hydrogen phosphate dodecahydrate**Article number:** 1310, 1349**CAS Number:**

10039-32-4

EC number:

231-448-7

Registration number 01-2119489797-11-XXXX**1.2 Relevant identified uses of the substance or mixture and uses advised against**

The product is not intended for use by consumers

For professional users only

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

PC19 Intermediate

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

Laboratory chemical

Chemical analytics

Commercial use

1.3 Details of the supplier of the safety data sheet**Manufacturer/Supplier:**

Th. Geyer GmbH & Co. KG

Dornierstr. 4 – 6

D-71272 Renningen

Tel.: +49(0)7159-1637-0, Fax:+49 (0)7159/18417

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- **Further information obtainable from:** Product management department
- **1.4 Emergency telephone number:**
National Poisons Information Service
City Hospital
Dudley Road
Birmingham B18 7QH
Tel.:Emergency: (00 44) 87 06 00 62 66
Members of the public seeking specific information on poisons should contact:
In England and Wales: NHS 111 - dial 111
In Scotland: NHS 24 - dial 111

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 GB 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: 10039-32-4 Disodium hydrogen phosphate dodecahydrate
- **Identification number(s)**
- **EC number:** 231-448-7

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**
First aider needs to protect himself.
Immediately remove any clothing soiled by the product.
- **After inhalation:**
Supply fresh air.
Seek medical treatment in case of complaints.
- **After skin contact:**
Wash with plenty of soap and water, take off soiled clothes and shoes.
After prolonged contact (accidental/forced) or any signs of skin changes (redness or other signs of inflammation), consult a doctor.
- **After eye contact:**
Rinse out opened eye for several minutes under running water.
Remove any contact lenses if possible.
Continue rinsing.
Seek medical treatment.

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- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Consult a doctor if you feel unwell.
Do not induce vomiting; call for medical help immediately.
- **Information for doctor:** Please observe safety data sheet/label.
- **4.2 Most important symptoms and effects, both acute and delayed**
Gastric or intestinal disorders
Cramp
- **Hazards** Danger of pulmonary oedema.
- **4.3 Indication of any immediate medical attention and special treatment needed**
In case of lung irritation, administer glucocorticoid dose aerosol.
Monitor circulation.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet.
- **5.2 Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **5.3 Advice for firefighters**
- **Protective equipment:** Do not inhale explosion gases or combustion gases.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
Use respiratory protective device against the effects of fumes/dust/aerosol.
Ensure adequate ventilation.
Avoid formation of dust.
Avoid contact with eyes and skin.
Do not breathe dust.
- **6.2 Environmental precautions:** Do not allow to enter sewers/surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Cover the sewerage system.
Pick up mechanically.
Send for recovery or disposal in suitable receptacles.
- **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.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Store in cool, dry place in tightly closed receptacles.
Keep away from heat and direct sunlight.
Apply the general protective and hygienic measures when handling chemicals.
No special measures required.
- **Information about fire - and explosion protection:** The product is not flammable.

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- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:**
 - Store away from oxidising agents.
 - Store away from flammable substances.
- **Further information about storage conditions:**
 - Protect from humidity and water.
 - Store in dry conditions.
- **Storage class:** 13
- **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:**
 - Respiratory protection is required in case of: Dust formation.
 - Recommended filter type: Filter type P1.
 - The employer shall ensure that maintenance, cleaning and testing of respiratory protective equipment is carried out in accordance with the manufacturer's user information and documented accordingly.
- **Hand protection**



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**
 - Information on suitable glove materials is not available at present.
 - However, experience has shown that the glove materials polychloroprene, nitrile rubber, butyl rubber, fluororubber and polyvinyl chloride are suitable for protection against undissolved solids.
 - 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.
 - Gloves should meet European requirements EN 374.
 - NBR: Acrylonitrile butadiene rubber
 - Material thickness > 0.11 mm
- **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.
 - Level 6 for applications > 480 min
- **Eye/face protection**



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· Body protection:


Protective work clothing (e. g. safety shoes EN ISO 20345, long-sleeved protective working garments).

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties
· General Information
· Physical state

Solid

· Colour:

Colourless

· Odour:

Odourless

· Melting point/freezing point:

35 °C

· Boiling point or initial boiling point and boiling range

Undetermined.

· Flammability

Product is not flammable.

· Lower and upper explosion limit
· Lower:

Not determined.

· Upper:

Not determined.

· Flash point:

Not applicable.

· Decomposition temperature:

Not determined.

· pH

9–9.4

· Viscosity:
· Kinematic viscosity

Not applicable.

· Dynamic:

Not applicable.

· Solubility
· water at 20 °C:

218 g/l

· Partition coefficient n-octanol/water (log value)

Not determined.

· Vapour pressure:

Not applicable.

· Density and/or relative density
· Density at 20 °C:
1.52 g/cm³

Not determined.

· Relative density

Not determined.

· 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:

Not determined.

· Explosive properties:

Product does not present an explosion hazard.

· Molecular weight

358.14 g/mol

· Change in condition
· Evaporation rate

Not applicable.

· Information with regard to physical hazard classes
· Explosives

Void

· Flammable gases

Void

· Aerosols

Void

· Oxidising gases

Void

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· 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** Stable when stored and handled properly.
- **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**
Protect from moisture.
Heat, flames and sparks.
- **10.5 Incompatible materials:** Avoid contact with other chemicals.
- **10.6 Hazardous decomposition products:** In case of fire: see section 5.

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	17,000 mg/kg /Wasser (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.
- **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:**
EC50 1.089 mg/l Daphnia magna anhydr. Lit. 48 Stunden
LC50 467 mg/l Koboldkärpfling (Gambusia affinis) anhydr. Lit. 48 Stunden
- **12.2 Persistence and degradability** No further relevant information available.

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- **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** Observe local (country-specific) regulations and laws.
- **Recommendation**
Smaller quantities can be disposed of with household waste.
Chemicals must be disposed of in accordance with the respective national regulations.

- **European waste catalogue**

06 00 00	WASTES FROM INORGANIC CHEMICAL PROCESSES
06 03 00	wastes from the MFSU of salts and their solutions and metallic oxides
06 03 99	wastes not otherwise specified

- **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** not regulated
- **14.2 UN proper shipping name**
- **ADR, ADN, IMDG, IATA** not regulated
- **14.3 Transport hazard class(es)**
- **ADR**
- **Class** - (-)
- **ADN/R Class:** not regulated
- **IMDG**
- **Class** not regulated
- **Label** -
- **14.4 Packing group**
- **ADR, IMDG, IATA** not regulated
- **14.5 Environmental hazards:** Not applicable.
- **14.6 Special precautions for user** Not applicable.
- **Hazard identification number (Kemler code):** -
- **EMS Number:** -
- **14.7 Maritime transport in bulk according to IMO instruments** Not applicable.

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· **UN "Model Regulation":** not regulated

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Inventory of Hazardous Chemicals** Substance is not listed.
- **Poisons Act**
- **Regulated explosives precursors** Substance is not listed.
- **Regulated poisons** Substance is not listed.
- **Reportable explosives precursors** Substance is not listed.
- **Reportable poisons** Substance is not listed.
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void

- **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.

- **National regulations:**

- **Information about limitation of use:**
Employment restrictions concerning juveniles must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.
- **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. The application, use and processing of our products are beyond our control and are therefore exclusively your responsibility.

- **Department issuing SDS:** Product management
- **Contact:** Product management
- **Version number of previous version:** 7
- **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

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PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

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

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