

# Safety Data Sheet

according to 1907/2006/EC, Article 31 (REACH)

Printing date 02.02.2009

Revision: 02.02.2009

## 1 Identification of substance

- . Product details
- . Trade name Tetrapotassium pyrophosphate, granular  
Artikelnummer: BK2271C
- . Article number: BK2271C
- . Application of the substance / the preparation
  - Alkaline cleaner/ detergent
  - Formulation additive
  - Metal surface treatment
  - Detergents

## \* 2 Hazards identification

- . Hazard designation:



Xi Irritant

- . Information pertaining to particular dangers for man and environment
  - Aqueous solutions or powders that become wet produce extremely slippery conditions.
  - R 36 Irritating to eyes.
- . Classification system
  - This product is not listed in EC directive 93/72/EC.
  - Labelled on the basis of internal knowledge.
- . GHS label elements



Warning

- 3.3/2A - Causes serious eye irritation.
- . Prevention:
  - Wash thoroughly after handling.
  - Wear protective gloves/protective clothing/eye protection/face protection.
- . Response:
  - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - If eye irritation persists: Get medical advice/attention.

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### 3 Composition/information on ingredients

- . Chemical characterization:
- . CAS No. Designation:  
7320-34-5 tetrapotassiumdiphosphate
- . Identification number(s):
- . EINECS Number: 230-785-7
- . Chemical characterization
- . Description: granulate
- . Dangerous components:  
CAS: 7320-34-5 tetrapotassiumdiphosphate 100%  
EINECS: 230-785-7 Xi; R 36  
Warning: Exclamation mark 3.3/2A

### 4 First aid measures

- . General information No special measures required.
- . After inhalation : Supply fresh air; consult doctor in case of symptoms.
- . After skin contact : Wash with water and soap.
- . After eye contact :  
Rinse opened eye for several minutes under running water. Then consult doctor.
- . After swallowing :  
Rinse out mouth and then drink plenty of water (approx. 500 ml).  
In case of persistent symptoms consult doctor.

### 5 Fire fighting measures

- . Suitable extinguishing agents  
Use fire fighting measures that suit the environment.  
CO2, extinguishing powder or water jet. Fight larger fires with foam.
- . For safety reasons unsuitable extinguishing agents Water with a full water jet.
- . Protective equipment: Wear alkaline resistant protective clothing.

### 6 Accidental release measures

- . Person-related safety precautions:  
Avoid causing dust.  
Wear protective clothing.
- . Measures for environmental protection:  
Do not allow concentrated solutions to enter drainage system, surface or ground water.
- . Measures for cleaning/collecting:  
Collect mechanically.  
Dispose of contaminated material as waste according to item 13.

### 7 Handling and storage

- . Handling
- . Information for safe handling:  
Prevent formation of dust.  
Wear breathing protection when decanting larger quantities without extractor facilities.

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- . **Information about protection against explosions and fires:**  
 The product is not flammable
- . **Storage**
- . **Requirements to be met by storerooms and containers:**  
 Do not use light alloy containers.
- . **Information about storage in one common storage facility:**  
 Do not store together with acids.
- . **Further information about storage conditions:**  
 This product is hygroscopic.  
 Store in cool, dry conditions in well sealed containers:

### 8 Exposure controls and personal protection

- . **Additional information about design of technical systems:**  
 No further data; see item 7.
- . **Components with critical values that require monitoring at the workplace:**  
 Not required.
- . 

CAS No.	Designation of material	%	Type	Value	Unit
	General dust exposure limit, measured as alveolic part	German TRGS 900 (2006)		3	mg/m <sup>3</sup>
- . **Additional information:**  
 The lists that were valid during compilation were used as a basis.
- . **Personal protective equipment**
- . **General protective and hygienic measures**  
 The usual precautionary measures should be adhered to in handling the chemicals.  
 Wash hands during breaks and at the end of the work.  
 Avoid contact with the eyes and skin.
- . **Breathing equipment:**  
 Use breathing protection in case of insufficient ventilation.  
 Dust mask according to DIN EN 140 or 149 (FFP1 or FFP2)
- . **Protection of hands:**  
 Protective gloves:  
 In case of spray contact at least protection index 2 recommended, according to more than 30 min. penetration time (EN 374).  
 Layer thickness of gloves at least: 0.4 mm  
 In case of prolonged and intensive contact protection index 6 recommended, according to more than 480 min. penetration time (EN 374).  
 Layer thickness of gloves at least: 0.7 mm
- . **Material of gloves**  
 Butyl rubber, BR  
 Fluorocarbon rubber (Viton)  
 Nitrile rubber, NBR  
 Natural rubber, NR  
 Chloroprene rubber, CR  
 Neoprene gloves
- . **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:** Safety glasses (DIN 58211, EN 166)
- . **Body protection:** Light weight protective clothing

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### 9 Physical and chemical properties:

#### . General Information

Form:	Granulate
Colour:	White
Smell:	Odourless

#### . Change in condition

Melting point/Melting range:	ca. 1100°C
Boiling point/Boiling range:	Not determined

#### . Flash point:

Not applicable

#### . Ignition temperature:

Not applicable

#### . Decomposition temperature:

Not determined

#### . Danger of explosion:

Product is not explosive.

#### . Critical values for explosion:

Oxidizing properties	None
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#### . Density

Settled apparent density at 20°C	ca. 900 kg/m <sup>3</sup>
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#### . Solubility in / Miscibility with Water at 20°C:

ca. 1800 g/l

#### . pH-value (10 g/l) at 20°C:

ca. 10.3

#### . Segregation coefficient (n-octanol/water):

ca. -2 log POW

### 10 Stability and reactivity

- . Thermal decomposition / conditions to be avoided:  
 No decomposition if used according to specifications.
- . Materials to be avoided: May react vigorously with strong acids.
- . Dangerous reactions: No dangerous reactions known
- . Dangerous composition products: No dangerous decomposition products known

### 11 Toxicological information

#### . Acute toxicity:

#### . LD/LC50 values that are relevant for classification:

Components		Type	Value	Species
Product	LD50:	oral	> 2000 mg/kg	rat
	LD50:	dermal	> 7940 mg/kg	rabbit

#### . Primary irritant effect:

- . on the skin: No irritant effect.
- . on the eye: Irritant effect.
- . Sensitization: No sensitizing effect known.

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**. Additional toxicological information:**

All ingredients are approved food additives according to EC directive 95/2/EC and 2001/5/EC.

**12 Ecological information:****. Information about elimination (persistence and degradability):****. Other information:**Inorganic salts are basically not biodegradable.  
Easy elimination possible by  
flocculation or adsorption by sludge**. Behaviour in environmental systems:****. Components:**

Product should not get in higher quantities into waste water because it may act as a plant nutrient and precipitate heavy metals.

**. Mobility and bioaccumulation potential:**

Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected.

**. Ecotoxicological effects:****. Behaviour in sewage processing plants:****. Type of test Effective concentration Method Assessment**

Fish toxicity	LC0: > 750 mg/l	(Golden orfey, 48 h)
	LC50: > 100 mg/l	(Rainbow trout, 96 h, OECD 203)
Daphnia toxicity	LC50: > 100 mg/l	(Daphnia magna, 48 h, OECD 202)

**. Other information:**No COD, no BOD, no AOX  
No VOC according to EC-directive 1999/13/EC**. General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

**13 Disposal considerations****. Product:****. Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Must be specially treated in adherence to official regulations.

**. European waste catalogue**

16 03 03 inorganic wastes containing dangerous substances

**. Uncleaned packaging:****. Recommendation:**

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

Dispose of packaging according to regulations on the disposal of packagings.

**. Recommended cleaning agent:** Water, if necessary with cleaning agent.

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### 14 Transport information

- . **Transport/Additional information:**  
 Not dangerous according to the above regulations.

### 15 Regulatory information

- . **Designation according to EC guidelines:**  
 Observe the normal safety regulations when handling chemicals  
 The product has been classified and labelled in accordance with EC Directives /  
 Ordinance on Hazardous Materials (GefStoffV)
- . **Code letter and hazard designation of product:**  
 Xi Irritant
- . **Risk phrases:**  
 36 Irritating to eyes.
- . **Safety phrases:**  
 25 Avoid contact with eyes.  
 26 In case of contact with eyes, rinse immediately with plenty of water and seek  
 medical advice.  
 39 Wear eye/face protection.
- . **National regulations**
- . **Information about limitation of use:**  
 Employment restrictions concerning young persons must be observed.
- . **Decree to be applied in case of technical fault:**  
 Major accidents hazards regulation, annex:  
 not applicable (German regulation)
- . **Water hazard class:** WGK 1 : low water hazard risk (German regulation)
- . **Other regulations, limitations and prohibitive regulations**  
 BG-information M004 "Irritant/corrosive substances" (German regulation)  
 The general dust exposure limit of 3 mg/m<sup>3</sup>, measured as alveolic part has to be  
 observed (German TRGS 900, 2006).

### 16 Other information:

- These data are based on our present knowledge. However, they shall not constitute  
 a guarantee for any specific product features and shall not establish a legally  
 valid contractual relationship.
- . **Relevant R-phrases**  
 36 Irritating to eyes.
  - . **Department issuing data specification sheet:**  
 Occupational health and safety department
  - . **Contact:**  
 Dr. Roland Gitzing  
 R.Gitzing@BK-Giulini.com
  - . **Abbreviations and acronyms:**  
 GHS: Globally Harmonized 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

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LD50: Lethal dose, 50 percent

\* Data compared to the previous version altered.

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