

Safety data sheet

acc. to 1907/2006/EC, Article 31 (REACH), 1272/2008/EC (CLP)

Printing date 19.12.2017

Version number 4

Revision: 19.12.2017

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

1.1 Product identifier

Trade name **JOHA S 230**

Article number: **BK7045**

Article number: BK7045

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

Food additives

Food additive

Uses advised against Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

BK Giulini GmbH

Member of ICL Group

Works Ladenburg, Dr.A.Reimann-Str.2

D-68526 Ladenburg

www.icl-pp.com

Tel: +49 6203 / 77-0

Fax: +49 6203 / 77-7256

Information:

Business Unit Food Specialties

Product information: Phone: + 49 6203 77 7148

Contact MSDS: MSDS@icl-group.com

1.4 Emergency telephone number: Works Ladenburg Phone +49 6203 / 77-112

SECTION 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 Dam. 1 H318 Causes serious eye damage.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS05

Signal word Danger

Hazard-determining components of labelling:

tetrasodium pyrophosphate

Monocalciumphosphate monohydrate

Hazard statements

H315 Causes skin irritation.

H318 Causes serious eye damage.

Precautionary statements

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

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P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P332+P313 If skin irritation occurs: Get medical advice/attention.

Information pertaining to particular dangers for man and environment

Aqueous solutions or powders that become wet produce extremely slippery conditions.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: not applicable

vPvB: not applicable

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description:

Mixture consisting of the following components:

Polyphosphates (E 452)

Diphosphates (E 450)

orthophosphates (E 339)

Dangerous components:

CAS: 7722-88-5	tetrasodium pyrophosphate	25 - <50%
EINECS: 231-767-1	Eye Dam. 1, H318; Acute Tox. 4, H302	
Reg.nr.: 01-2119489794-17-0001		
CAS: 10031-30-8	Monocalciumphosphate monohydrate	10 - <25%
EINECS: 231-837-1	Eye Dam. 1, H318	
Reg.nr.: 01-2119490065-39-0020		
CAS: 7601-54-9	Trisodium monophosphate	10 - <25%
EINECS: 231-509-8	Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	
Reg.nr.: 01-2119489800-32-0003		

SVHC No

Additional information For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Instantly remove any clothing soiled by the product.

After inhalation : Supply fresh air; consult doctor in case of symptoms.

After skin contact :

Immediately wash with soap and water and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact :

Rinse opened eye for 15 minutes under running water.

Use eye protection.

Call a doctor immediately.

After swallowing :

Rinse out mouth and then drink plenty of water (approx. 500 ml).

In case of persistent symptoms consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

Causes serious eye damage.

Causes skin irritation.

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- . **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 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.
- . **5.2 Special hazards arising from the substance or mixture**
Fire can cause release of :
Phosphorus oxides (P_xO_y)
sodium oxide
- . **5.3 Advice for firefighters**
- . **Protective equipment:**
Do not inhale explosion gases or combustion gases.
Wear self-contained breathing apparatus.
- . **Additional information**
Aqueous solutions or powders that become wet produce extremely slippery conditions.
Collect contaminated fire fighting water separately. It must not enter drains.
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.
Avoid causing dust.
Ensure adequate ventilation
Product forms slippery surface when combined with water.
- . **6.2 Environmental precautions:**
Do not allow concentrated solutions to enter drainage system, surface or ground water.
- . **6.3 Methods and material for containment and cleaning up:**
Collect mechanically.
Avoid causing dust.
Dispose of contaminated material as waste according to section 13.
- . **6.4 Reference to other sections**
See section 7 for information on safe handling
See section 8 for information on personal protection equipment.

* SECTION 7: Handling and storage

- . **7.1 Precautions for safe handling**
No special precautions necessary if used correctly.
Prevent formation of dust.
Provide suction extractors if dust is formed.
- . **Information about protection against explosions and fires:**
The product is not flammable
No special measures required.
- . **7.2 Conditions for safe storage, including any incompatibilities**
- . **Storage**
- . **Requirements to be met by storerooms and containers:** No special requirements.
- . **Information about storage in one common storage facility:** Not required.

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- . **Further information about storage conditions:**
Store in cool, dry conditions in well sealed containers.
Protect from humidity and keep away from water.
This product is hygroscopic.
- . **7.3 Specific end use(s)** No further relevant information available.

* SECTION 8: Exposure controls/personal protection

- . **Additional information about design of technical systems:** No further data; see section 7.

. 8.1 Control parameters

- . **Components with critical values that require monitoring at the workplace:**

7722-88-5 tetrasodium pyrophosphate

WEL (Great Britain) Long-term value: 5 mg/m³

. DNELs

7722-88-5 tetrasodium pyrophosphate

Inhalative Worker 44.08 mg/m³ (long-term exposure, systemic effects)

General population 10.87 mg/m³ (long-term exposure, systemic effects)

10031-30-8 Monocalciumphosphate monohydrate

Inhalative Worker 4.07 mg/m³ (long-term exposure, systemic effects) (DNEL)

General population 3.04 mg/m³ (long-term exposure, systemic effects) (DNEL)

7601-54-9 Trisodium monophosphate

Inhalative Worker 4.07 mg/m³ (long-term exposure, systemic effects)

General population 3.04 mg/m³ (long-term exposure, systemic effects)

. PNECs

10031-30-8 Monocalciumphosphate monohydrate

Sewage treatment 50 mg/L (sewage-treatment plant) (PNEC)

- | CAS No. | Designation of material | % | Type | Value | Unit |
|---------|--|---|------------------------|-------|-------------------|
| | General dust exposure limit, measured as alveolic part | | German TRGS 900 (2015) | 1,25 | mg/m ³ |

- . **Additional information:** The lists that were valid during compilation were used as a basis.

. 8.2 Exposure controls

. 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.

Instantly remove any soiled and impregnated garments.

. 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

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. 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: Tightly sealed safety glasses (DIN 58211, EN 166)

. Body protection: Light weight protective clothing

SECTION 9: Physical and chemical properties

. 9.1 Information on basic physical and chemical properties

. General Information

. Appearance:

Form: Powder

Colour: White

. Smell: Odourless

. Odour threshold: not applicable

. pH-value (10 g/l) at 20 °C: ca. 7,6 (Suspension)

. Change in condition

Melting point/freezing point: not determined

Initial boiling point and boiling range: not determined

. Flash point: not applicable

. Inflammability (solid, gaseous) Product is not inflammable.

. Ignition temperature: not applicable

. Decomposition temperature: not determined

. Explosive properties: Product is not explosive.

. Critical values for explosion:

Lower: not applicable

Upper: not applicable

Dust explosion class: not applicable

. Oxidising properties none

. Steam pressure: not applicable

. Density

Settled apparent density at 20 °C ca. 1100 kg/m³

Evaporation rate not determined

. Solubility in / Miscibility with

Water: Partly soluble

. Partition coefficient: n-octanol/water: ca. -2 log POW

. Viscosity:

dynamic: not applicable

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kinematic:

not applicable

. 9.2 Other information

No further relevant information available.

* SECTION 10: Stability and reactivity

- . **10.1 Reactivity** No hazardous reactions when stored and handled according to instructions.
- . **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** Exposure to moisture.
- . **10.5 Incompatible materials:** No further relevant information available.
- . **10.6 Hazardous decomposition products:**
Fire can cause release of :
Phosphorus oxides (P_xO_y)
sodium oxide
- . **Additional information:** This product is hygroscopic.

* SECTION 11: Toxicological information

- . **11.1 Information on toxicological effects**
- . **Acute toxicity** Based on available data, the classification criteria are not met.
- . **LD/LC50 values that are relevant for classification:**
- 7722-88-5 tetrasodium pyrophosphate**
 - Oral LD50 1,624 mg/kg (rat) (OECD 425)
 - Dermal LD50 >2,000 mg/kg (rabbit)
- 10031-30-8 Monocalciumphosphate monohydrate**
 - Oral LD50 7,100 mg/kg (rat)
 - Dermal LD50 >7,940 mg/kg (rabbit)
 - Inhalative LC50 (4 h) >2.6 mg/L (rat) (OECD 403)
- 7601-54-9 Trisodium monophosphate**
 - Oral LD50 >2,000 mg/kg (rat) (OECD 420)
 - Dermal LD50 >2,000 mg/kg (rat) (OECD 402 (READ-Across))
 - Inhalative LC50 (4 h) >0.83 mg/L (rat) (OECD 403 (Read-across))
- . **Primary irritant effect:**
- . **Skin corrosion/irritation**
Causes skin irritation.
- . **Serious eye damage/irritation**
Causes serious eye damage.
- . **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- . **Additional toxicological information:**
- 7722-88-5 tetrasodium pyrophosphate**
 - Oral NOAEL 500 mg/kg bw/day (rat) (OECD 408)
 - NOEL 250 mg/kg bw/d (rat) (OECD 408)
- . **Repeated dose toxicity** No further relevant information available.
- . **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.

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- . **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:**

7722-88-5 tetrasodium pyrophosphate

- LC50 (96 h) >100 mg/L (rainbow trout) (OECD 203 (READ-ACROSS))
- EC50 (3 h) (static) >1,000 mg/L (bacteria) (OECD 209 (READ ACROSS))
- EC50 (48 h) (static) >100 mg/L (daphnia magna) (EPA OTS 797.1300 (READ ACROSS))
- EC50 (72 h) (static) >100 mg/L (desmodesmus subspicatus) (OECD 201 (READ-ACROSS))

10031-30-8 Monocalciumphosphate monohydrate

- LC50 (96 h) >1,000 mg/L (rainbow trout)
- EC50 (3 h) >1,000 mg/L (activated sludge) (OECD 209 READ ACROSS)
- EC50 (48 h) >485 mg/L (daphnia magna)
- EC50 (72 h) >100 mg/L (desmodesmus subspicatus) (OECD 201 READ ACROSS)

7601-54-9 Trisodium monophosphate

- LC50 (96 h) >100 mg/L (rainbow trout) (OECD 203 (READ ACROSS))
- EC50 (3 h) >1,000 mg/L (activated sludge) (OECD 209 (READ ACROSS))
- EC50 (48 h) >100 mg/L (daphnia magna) (OECD 202 (READ ACROSS))
- EC50 (72 h) >100 mg/L (desmodesmus subspicatus) (OECD 201 (READ ACROSS))

- . **12.2 Persistence and degradability** Inorganic salts are basically not biodegradable.

- . **Other information:** 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.

- . **12.3 Bioaccumulative potential** Does not accumulate in organisms

- . **12.4 Mobility in soil** No further relevant information available.

- . **Ecotoxicological effects:**

- . **Other information:**

No COD, no BOD, no AOX

No VOC according to EC-directive 1999/13/EC

- . **Additional ecological information:**

- . **General notes:**

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

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

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. **European waste catalogue**

16 03 03* inorganic wastes containing hazardous substances

. **Uncleaned packaging:**

. **Recommendation:**

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

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

SECTION 14: Transport information

. **14.1 UN-Number**

. **ADR/RID/ADN, IMDG, IATA** Void

. **14.2 UN proper shipping name**

. **ADR/RID/ADN, IMDG, IATA** Void

. **14.3 Transport hazard class(es)**

. **ADR/RID/ADN, IMDG, IATA**

. **Class** Void

. **14.4 Packing group**

. **ADR/RID/ADN, IMDG, IATA** Void

. **14.5 Environmental hazards:** Not applicable.

. **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.

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

. **UN "Model Regulation":** Void

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** None of the ingredients is listed.

. **National regulations**

. **Information about limitation of use:** Employment restrictions concerning young persons must be observed.

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

* SECTION 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 phrases**

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

. **Department issuing data specification sheet:** Hazard Communication

. **Contact:** MSDS@icl-group.com

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. **Abbreviations and acronyms:**

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 Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

. **Sources:** source ECHA: European Chemicals Agency, <http://echa.europa.eu/>

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