

## Safety data sheet

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

Printing date 22.11.2017

Version number 3

Revision: 22.11.2017

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

. **1.1 Product identifier**

. Trade name **JOHA K**

**Article number: BK1221B**

. **Article number:** BK1221B

. **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

. **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**

Eye Irrit. 2 H319 Causes serious eye irritation.

. **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**



GHS07

. **Signal word** Warning

. **Hazard-determining components of labelling:**

phosphoric acid  
Disodium dihydrogendiphosphate

. **Hazard statements**

H319 Causes serious eye irritation.

. **Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection.  
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.

. **2.3 Other hazards**

. **Results of PBT and vPvB assessment**

. **PBT:** not applicable

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. vPvB: not applicable

### SECTION 3: Composition/information on ingredients

#### . 3.2 Chemical characterisation: Mixtures

##### . Description:

Mixture consisting of the following components:

Diphosphates (E 450)

Phosphoric acid

##### . Dangerous components:

CAS: 7758-16-9	Disodium dihydrogendiphosphate	95-100%
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EINECS: 231-835-0	Eye Irrit. 2, H319	
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Reg.nr.: 01-2119489793-19-0001

CAS: 7664-38-2	phosphoric acid	2.5- <5%
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EINECS: 231-633-2	Met. Corr.1, H290; Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4,	
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Index number: 015-011-00-6	H302	
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Reg.nr.: 01-2119485924-24-0009

##### . 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.

In case of persistent symptoms consult doctor.

. After eye contact : Rinse opened eye for 15 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.

. 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

. 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.

CO<sub>2</sub>, 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 :

Phosphoric acid (H<sub>3</sub>PO<sub>4</sub>)

Phosphorus oxides (P<sub>x</sub>O<sub>y</sub>)

sodium oxide

##### . 5.3 Advice for firefighters

##### . Protective equipment:

Wear self-contained breathing apparatus.

Do not inhale explosion gases or combustion gases.

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Acid resistant protective clothing

**Additional information**

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.

**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.

**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 information on disposal.

### \* SECTION 7: Handling and storage

**7.1 Precautions for safe handling**

Prevent formation of dust.

Keep containers tightly sealed.

Store in cool, dry conditions in well sealed containers.

Use only in well ventilated areas.

Ensure that suitable extractors are available on processing machines

Carry out filling operations only at sites with extractors available.

**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:** Do not store together with alkalis (caustic solutions).

**Further information about storage conditions:** Store in cool, dry conditions in well sealed containers.

**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:**

**7664-38-2 phosphoric acid**

WEL (Great Britain) Short-term value: 2 mg/m<sup>3</sup>

Long-term value: 1 mg/m<sup>3</sup>

IOELV (European Union) Short-term value: 2 mg/m<sup>3</sup>

Long-term value: 1 mg/m<sup>3</sup>

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### . DNELs

#### 7758-16-9 Disodium dihydrogendiphosphate

Inhalative Worker 44.08 mg/m<sup>3</sup> (long-term exposure, systemic effects)

General population 10.87 mg/m<sup>3</sup> (long-term exposure, systemic effects)

#### 7664-38-2 phosphoric acid

Oral General population 0.1 mg/kg bw/day (long-term exposure, systemic effects)

Inhalative Worker 1 mg/m<sup>3</sup> (long-term exposure, local effect)

10.7 mg/m<sup>3</sup> (long-term exposure, systemic effects)

2 mg/m<sup>3</sup> (short term exposure, local effects)

General population 0.36 mg/m<sup>3</sup> (long-term exposure, local effect)

4.57 mg/m<sup>3</sup> (long-term exposure, systemic effects)

### . CAS No. Designation of material % Type Value Unit

General dust exposure limit, German TRGS 900 (2015) 1,25 mg/m<sup>3</sup>  
measured as alveolic part

. **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

#### . 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:** Acid resistant protective clothing

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### SECTION 9: Physical and chemical properties

#### . 9.1 Information on basic physical and chemical properties

##### . General Information

##### . Appearance:

Form: Solid

Colour: White

. Smell: Odourless

. Odour threshold: not applicable

. pH-value (10 g/l) at 20 °C: ca. 2.8

##### . Change in condition

Melting point/freezing point: Not determined

Initial boiling point and boiling range: Not determined

. Flash point: not applicable

. Inflammability (solid, gaseous) not applicable

. 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:

Oxidising properties: none

. Steam pressure: not applicable

##### . Density

Settled apparent density at 20 °C: ca. 1100 kg/m<sup>3</sup>

Evaporation rate: not applicable

##### . Solubility in / Miscibility with

Water at 20 °C: ca. 130 g/l  
Readily soluble

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

##### . Viscosity:

dynamic: not applicable

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: Thermal decomposition starts at 220 °C.

. 10.3 Possibility of hazardous reactions: Reacts with strong alkali

#### . 10.4 Conditions to avoid

Heating.

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Contact with basic materials

Exposure to moisture.

. **10.5 Incompatible materials:** Alkali

. **10.6 Hazardous decomposition products:**

Fire can cause release of :

Phosphoric acid (H<sub>3</sub>PO<sub>4</sub>)

Phosphorus oxides (P<sub>x</sub>O<sub>y</sub>)

sodium oxide

### 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:**

**7758-16-9 Disodium dihydrogendiphosphate**

Oral LD50 > 2000 mg/kg (rat)

Dermal LD50 > 7940 mg/kg (rabbit)

**7664-38-2 phosphoric acid**

Oral LD50 >300 - <2000 mg/kg (rat) (WoE)

Dermal LD50 2740 mg/kg (rabbit)

. **Primary irritant effect:**

. **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

. **Serious eye damage/irritation**

Causes serious eye irritation.

. **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

. **Additional toxicological information:**

**7664-38-2 phosphoric acid**

Oral NOAEL, systemic toxicity 250 mg/kg bw/day (rat) (OECD 422)

. **Repeated dose toxicity** No further relevant information available.

. **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** No further relevant information available.

. **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.

### SECTION 12: Ecological information

. **12.1 Toxicity**

. **Aquatic toxicity:**

LC0 (48 h) > 1500 mg/L (golden orfey)

**7758-16-9 Disodium dihydrogendiphosphate**

LC50 (96 h) 840 mg/L (Salmo gairdneri)

EC50 (3 h) (static) > 1000 mg/L (activated sludge) (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)

NOEC (static) 100 mg/L (daphnia magna) (EPA OTS 797.1300 READ ACROSS)

100 mg/L (desmodesmus subspicatus) (OECD 201 READ ACROSS)

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1000 mg/L (activated sludge) (OECD 209 READ ACROSS)

### 7664-38-2 phosphoric acid

- LC50 (96 h) 75 mg/L (Oryzias latipes) (OECD 203)
- EC50 (3 h) (static) 270 mg/L (activated sludge) (OECD 209)
- EC50 (48 h) (static) > 100 mg/L (daphnia magna) (OECD 202)
- EC50 (72 h) (static) > 100 mg/L (desmodesmus subspicatus) (OECD 201)
- NOEC 42 mg/L (Oryzias latipes) (OECD 203)
- 56 mg/L (daphnia magna) (OECD 202 (48 h))
- 100 mg/L (desmodesmus subspicatus) (OECD 201 (72 h))
- 1000 mg/L (activated sludge) (OECD 209)

- . **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. Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.
- . **European waste catalogue**  
16 03 03\* inorganic wastes containing dangerous 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

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- . 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.
- . Other regulations, limitations and prohibitive regulations
- . Chemical inventories:  
All ingredients listed in:  
Europe (EINECS): yes  
Australia (AICS): yes  
Canada (DSL): yes  
Japan (ENCS): yes  
China (IECSC): yes  
Korea (KECI): yes  
USA (TSCA): yes  
Philippines (PICCS): yes
- . 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  
H290 May be corrosive to metals.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.
- . Department issuing data specification sheet: Product Safety and Regulatory Affairs
- . Contact: MSDS@icl-group.com
- . 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 Organisation

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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)

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

Met. Corr. 1: Corrosive to metals – Category 1

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

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

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

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

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