



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

Printing date 18.03.2015

Version number: 2

Revision date: 18.03.2015

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

**- 1.1 Product identifier**

**- Trade name:** **20-20-20**

**- Article number:**

MS-100016

6120202002

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

Fertilizer.

Identified uses

No uses advised against.

**- 1.3 Details of the supplier of the safety data sheet**

**- Manufacturer/Supplier:**

Fertilizers & Chemicals Ltd.

P.O.Box 1428, Haifa 31013,

Industrial area Kiryat Ata

Deshanim@icl-group.com

Israel.

**- Further information obtainable from:**

Safety Department:

Tel: +972-4-8468407/406

Fax number: +972-4-8468360

**- 1.4 Emergency telephone number:**

Tel: +972-4-8468222, +972-4-8468229

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Tel: +972-4-8468178/179

Fax number: +972-4-8468296

**SECTION 2: Hazards identification**

**- 2.1 Classification of the substance or mixture**

**- Classification according to Regulation (EC) No 1272/2008**



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

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



Xi; Irritant

R36: Irritating to eyes.

**- Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

**- Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

**- 2.2 Label elements**

**- Labelling according to Regulation (EC) No 1272/2008**

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

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**- Hazard pictograms**

GHS07

**- Signal word** Warning**- Hazard statements**

H319 Causes serious eye irritation.

**- Precautionary statements**



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

P264 Wash thoroughly after handling.

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.**- vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****- 3.2 Mixtures****- Description:** Mixture: consisting of the following components:**- Components:**

CAS: 57-13-6 EINECS: 200-315-5	urea	substance with a Community workplace exposure limit	25-50%
CAS: 14887-42-4 EINECS: 238-961-5	PeKacid	 Xi R36  Eye Irrit. 2, H319	2,5-10%

**- Components:**

CAS: 7447-40-7 EINECS: 231-211-8	potassium chloride	25-50%
CAS: 7722-76-1 EINECS: 231-764-5	ammonium dihydrogenorthophosphate	10-25%

**- Additional information:** For the wording of the listed risk phrases refer to section 16.**SECTION 4: First aid measures****- 4.1 Description of first aid measures****- General information:**

Check the casualty's state of consciousness, breathing and pulse; put in emergency position or revive.

**- After inhalation:** Possible symptoms are coughing and/or dyspnea.**- After skin contact:**

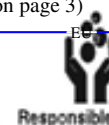
Change contaminated clothing immediately. Rinse with plenty of water for at least 20 minutes.

If skin irritation continues, consult a doctor.

**- After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.**- After swallowing:**

Possible symptoms are nausea and/or vomiting.

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A person vomiting while laying on their back should be turned onto their side.

NOTE: Never give an unconscious person anything to drink.

Rinse out mouth and then drink plenty of water.

- **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:** CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray.

- **5.2 Special hazards arising from the substance or mixture**

Phosphorus oxides (e.g. P<sub>2</sub>O<sub>5</sub>)

Toxic metal compounds (K<sub>2</sub>O)

Nitrogen oxides (NO<sub>x</sub>)

- **5.3 Advice for firefighters**

- **Protective equipment:**

Wear fully protective suit.

Wear self-contained respiratory protective device.

### ***SECTION 6: Accidental release measures***

- **6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation

Avoid formation of 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:**

Shovel or sweep up. Do not create a powder cloud by using a brush or compressed air.

Prevent product from entering drains.

Ensure adequate ventilation.

- **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**

Provide suction extractors if dust is formed.

Avoid contact with eyes, skin and clothing.

Ensure good ventilation/exhaustion at the workplace.

- **Information about fire - and explosion protection:** No special measures required.

- **7.2 Conditions for safe storage, including any incompatibilities**

- **Requirements to be met by storerooms and receptacles:**

Store in a cool, dry, well ventilated place in tightly closed receptacles.

- **Information about storage in one common storage facility:** Keep away from food, drink and animal feeding stuff.

- **Further information about storage conditions:**

Protect from humidity and water.

Partly used bags should be closed well.

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Keep container tightly sealed.  
- 7.3 *Specific end use(s)* Water soluble fertilizer.**SECTION 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:***57-13-6 urea**WEEL (USA) 10 mg/m<sup>3</sup> (())**57-13-6 urea**WEEL (USA) Long-term value: 10 mg/m<sup>3</sup>- *DNELs* For Ingredients:- *For workers:***57-13-6 urea**

Dermal DNEL: Short-term-systemic effect(W) 580 mg/kg bw/day (())

Inhalative DNEL: Short-term-systemic effect(W) 292 mg/m<sup>3</sup> (())**7722-76-1 ammonium dihydrogenorthophosphate**

Dermal DNEL: Long-term-systemic effects(W) 34,7 mg/kg bw/day (())

Inhalative DNEL: Long-term-systemic effect(W) 6,1 mg/m<sup>3</sup> (())**14887-42-4 PeKacid**Inhalative DNEL: Long-term-systemic effect(W) 4,07 mg/m<sup>3</sup> (())- *For general population:***57-13-6 urea**

Oral DNEL: Short-term-systemic effect(P) 42 mg/kg bw/day (())

Dermal DNEL: Short-term-systemic effect(P) 580 mg/kg bw/day (())

Inhalative DNEL: Short-term-systemic effect(P) 125 mg/m<sup>3</sup> (())**7722-76-1 ammonium dihydrogenorthophosphate**

Oral DNEL: Long-term-systemic effect(P) 2,1 mg/kg bw/day (())

Dermal DNEL: Long-term-systemic effect(P) 20,8 mg/kg bw/day (())

Inhalative DNEL: Long-term-systemic effect(P) 1,8 mg/m<sup>3</sup> (())**14887-42-4 PeKacid**Inhalative DNEL: Long-term-systemic effect(P) 3,04 mg/m<sup>3</sup> (())- *PNECs***57-13-6 urea**

PNEC Aqua (freshwater): 0,047 mg/l (())

PNEC aqua (marine water): 0,047 mg/l (())

**7722-76-1 ammonium dihydrogenorthophosphate**

PNEC Aqua (freshwater): 1,7 mg/l (())

PNEC STP: 10 mg/l (())

PNEC aqua (intermittent releases): 17 mg/l (())

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PNEC aqua (marine water):	0,17 mg/l (())
<b>14887-42-4 PeKacid</b>	
PNEC Aqua (freshwater):	0,05 mg/l (())
PNEC STP:	50 mg/l (())
PNEC aqua (intermittent releases):	0,5 mg/l (())
PNEC aqua (marine water):	0,005 mg/l (())

**- Additional information:**

Ventilation must be sufficient to maintain TLV-TWA below 3 mg/m<sup>3</sup>, respirable particles, and 10 mg/m<sup>3</sup>, inhalable particles [ACGIH recommendation for particles (insoluble or poorly soluble). Not Otherwise Specified (PNOS)]  
The lists valid during the making were used as basis.

**- 8.2 Exposure controls****- Personal protective equipment:****- General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes.  
Avoid contact with the eyes and skin.

**- Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

**- Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**- Material of gloves**

PVC gloves

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**- Eye protection:**

Tightly sealed goggles

Safety glasses

**- Body protection:**

Protective work clothing

Boots

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**SECTION 9: Physical and chemical properties****- 9.1 Information on basic physical and chemical properties****- General Information****- Appearance:****Form:** Crystalline powder**Colour:** Red**- Odour:** Characteristic**- Odour threshold:** Not determined.**- pH-value (10 g/l) at 25 °C:** 3,2±0,5**- Change in condition****Melting point/Melting range:** Undetermined.**Boiling point/Boiling range:** Undetermined.**- Flash point:** Not applicable.**- Flammability (solid, gaseous):** Not determined.**- Ignition temperature:****Decomposition temperature:** Not determined.**- Self-igniting:** Product is not selfigniting.**- Danger of explosion:** Product does not present an explosion hazard.**- Explosion limits:** Not applicable**- Lower:** Not determined.**- Upper:** Not determined.**- Vapour pressure:** Not applicable.**- Density:** Not determined.**- Relative density** Not determined.**- Vapour density** Not applicable.**- Evaporation rate** Not applicable.**- Solubility in / Miscibility with water:**

Soluble.

**- Partition coefficient (n-octanol/water):** Not determined.**- Viscosity:** Not applicable

This product is solid. Viscosity is only relevant to liquids.

**- Dynamic:** Not applicable.**- Kinematic:** Not applicable.**- Solvent content:****Organic solvents:** 0,0 %**Solids content:** 100,0 %**- 9.2 Other information** No further relevant information available.**SECTION 10: Stability and reactivity****- 10.1 Reactivity** No decomposition if used according to specifications.

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- **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** Source of ignition, heat, fire, high humidity, sparks.
- **10.5 Incompatible materials:** Combustible materials
- **10.6 Hazardous decomposition products:**  
Formation of toxic gases is possible during heating or in case of fire.  
Phosphorus oxides (e.g. P<sub>2</sub>O<sub>5</sub>)  
Toxic metal compounds (K<sub>2</sub>O)  
Nitrogen oxides (NO<sub>x</sub>)

**SECTION 11: Toxicological information**

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values relevant for classification:****57-13-6 urea**

Oral LD50 8471 mg/kg (rat)

**7722-76-1 ammonium dihydrogenorthophosphate**

Oral LD50 &gt;2000 mg/kg (rat) (OECD 425)

Dermal LD50 &gt;5000 mg/kg (rat) ((OECD 402))

**14887-42-4 PeKacid**

Oral LD50 &gt;2000 mg/kg (rat) ((OECD 425))

Dermal LD50 &gt;2000 mg/kg (rat) ((OECD 402))

**7447-40-7 potassium chloride**

Oral LD50 3020 mg/kg (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **by Inhalation:** Inhalation might cause sensitization.
- **by Ingestion:** Ingestion might cause gastrointestinal irritation, nausea, vomiting and diarrhea.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant

**SECTION 12: Ecological information**

- **12.1 Toxicity**

- **Aquatic toxicity:****7722-76-1 ammonium dihydrogenorthophosphate**LC50/96h (static) >85,9 mg/l (fish *Oncorhynchus mykiss*) (OECD 203)**7447-40-7 potassium chloride**

EC50/120h 1337 mg/l (algae)

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EC50/21d	130 mg/l (daphnia magna)
LC50/96h	880 mg/l (Fathead minnow fish)

- **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.
- **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 together with household garbage. Do not allow product to reach sewage system.
- **European waste catalogue** 02 01 08\* agrochemical waste containing dangerous substances.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

**SECTION 14: Transport information**

- |   |                              |
|---|------------------------------|
| - <b>14.1 UN-Number</b>   | Not classified for transport |
| - <b>DOT, ADR, ADN, IMDG, IATA</b>  | None                         |
| - <b>14.2 UN proper shipping name</b>   | None                         |
| - <b>ADR, ADN, IMDG, IATA</b>   | None                         |
| - <b>14.3 Transport hazard class(es)</b>  | None                         |
| - <b>DOT, ADR, ADN, IMDG, IATA</b>  | None                         |
| - <b>Class</b>  | None                         |
| - <b>14.4 Packing group</b>   | Not applicable               |
| - <b>ADR, ADN, IMDG, IATA</b>   | None                         |
| - <b>14.5 Environmental hazards:</b>  |                              |
| - <b>Marine pollutant:</b>  | No                           |
| - <b>14.6 Special precautions for user</b>  | Not applicable.              |
| - <b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.              |
| - <b>UN "Model Regulation":</b>   | -                            |

**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.

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**- Hazard pictograms**

GHS07

**- Signal word** Warning**- Hazard statements**

H319 Causes serious eye irritation.

**- Precautionary statements**

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

P264 Wash thoroughly after handling.

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.

**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.

All information, recommendations and suggestions herein concerning our products are based upon tests and data believed to be reliable, however, it is the users responsibility to determine the safety, toxicity and suitability for his own use of the product described herein.

Since the actual use by others is beyond our control, no guarantee, expressed or impressed or implied is made by F&C, as to the effects of such use, the results to be obtained or the safety and toxicity of the product nor does F&C assume any liability arising out of the use, by others, of the product referred to herein.

Nor is the information herein to be construed as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or governmental regulation.

**- Relevant phrases**

H319 Causes serious eye irritation.

R36 Irritating to eyes.

**- Contact:**

Regulatory Affairs Department

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Ella.Rozenblit@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 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

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized 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)

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

**- Reason for revision:** Periodical review

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