

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

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

- 1.1 Product identifier

- Trade name: KEEP

- Article number: MS-219

- CAS Number:

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

- 1.3 Details of the supplier of the safety data sheet

- Manufacturer/Supplier:

Fertilizers & Chemicals Ltd.
P.O.Box 1428, Haifa 3101302,
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

Fax: +972-4-8468110

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.

- 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 statements

H319 Causes serious eye irritation.

- Precautionary statements

P264 Wash thoroughly after handling.

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.

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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: 13977-65-6	Monopotassium salt of Phosphorous acid	Eye Irrit. 2, H319	25-50%
CAS: 13492-26-7	Dipotassium salt of Phosphorous acid		10-25%
CAS: 7732-18-5 EINECS: 231-791-2	water, distilled, conductivity or of similar purity		25-50%

- **SVHC** None

- **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:**

Take affected persons out of danger area and lay down.
Check the casualty's state of consciousness, breathing and pulse; put in emergency position or revive.
In case of irregular breathing or respiratory arrest provide artificial respiration.
Do not leave affected persons unattended.

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

- **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.
Remove contaminated clothing.
If skin irritation continues, consult a doctor.

- **After eye contact:**

Rinse opened eye for 15 minutes under running water. Remove contact lenses.
If eye irritation persists, consult a specialist.

- **After swallowing:**

Rinse out mouth and then drink plenty of water.
Do not induce vomiting.
Seek medical treatment.

NOTE: Never give an unconscious person anything to drink.

- **4.2 Most important symptoms and effects, both acute and delayed**

After eye contact: Redness of the eye tissue. Inflammation/damage of the eye tissue.
AFTER ABSORPTION OF HIGH QUANTITIES: Gastrointestinal complaints. Nausea. Diarrhoea. Irritation of the gastric/intestinal mucosa.
Inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract

- **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

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SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Phosphorous oxides (POx)
- **5.3 Advice for firefighters**
Wear fully protective suit.
Wear self-contained respiratory protective device.
Do not inhale explosion gases or combustion gases.
Use water spray to cool containers that are exposed to flames until fire is out.
- **Protective equipment:**
Do not stay in dangerous zone without suitable chemical protective clothing and self-contained breathing apparatus in positive pressure mode.
Wear self-contained respiratory protective device.
Mouth respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Do not inhale vapor/aerosols.
- **6.2 Environmental precautions:**
Do not allow to enter sewers/ surface or ground water.
Dilute with plenty of water.
- **6.3 Methods and material for containment and cleaning up:**
Stop leak if it can be done without risk. If possible pump up spilled material or take up with liquid-absorbent material (e.g. dry sand, earth, or vermiculite). Collect leakage in sealed suitable container. Forward for disposal.
Wash area after clean-up is complete.
- **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**
Avoid contact with eyes, skin and clothing.
Do not inhale gases / fumes / aerosols.
Ensure good ventilation/exhaustion at the work place.
Keep receptacles tightly sealed.
Wear all recommended personal protective clothing when handling.
- **Information about fire - and explosion protection:** The product is not flammable.
- **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.

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Protect from heat and direct sunlight
Protect from humidity and water.
Keep away from iron, Metal, lead.

- Information about storage in one common storage facility:

Keep substance away from: oxidizing agents, (strong) acids, (strong) bases.

- Further information about storage conditions: Keep container tightly sealed.

- 7.3 Specific end use(s) Agriculture.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities:

Provide local exhaust ventilation system. Where there is possibility of exposure, eye wash fountain and safety shower should be provided within the immediate work area for emergency use.

- 8.1 Control parameters

- Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- For workers:

13977-65-6 Monopotassium salt of Phosphorous acid

Dermal	DNEL: Long-term-systemic effects(W)	59 mg/kg bw/day (rat)
Inhalative	DNEL: Long-term-systemic effect(W)	41,2 mg/m ³ (())

- For general population:

13977-65-6 Monopotassium salt of Phosphorous acid

Oral	DNEL: Long-term-systemic effect(P)	2,9 mg/kg bw/day (rat)
Dermal	DNEL: Long-term-systemic effect(P)	29 mg/kg bw/day (rat)
Inhalative	DNEL: Long-term-systemic effect(P)	10,2 mg/m ³ (())

- PNECs

13977-65-6 Monopotassium salt of Phosphorous acid

PNEC Aqua (freshwater):	0,137 mg/l (())
PNEC aqua (marine water):	0,0137 mg/l (())
PNEC aqua (intermittent releases):	1,37 mg/l (())
PNEC STP:	100 mg/l (())
PNEC (Soil)	1 mg/kg (())

- Additional information: The lists valid during the making were used as basis.

- 8.2 Exposure controls

- General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Do not inhale dust / smoke / mist.
Avoid contact with the eyes and skin.
Do not eat, drink, smoke or sniff while working.

- Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.
Filter P2 Required when vapours/aerosols are generated.

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- 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

- Butyl rubber, BR
- Nitrile rubber, NBR
- 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.

- 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



Tightly sealed goggles

- Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties

- General Information

- Appearance:

- Form:** Solution
- Colour:** Colourless
- Odour:** Odourless
- Odour threshold:** Not determined.

- pH-value at 25 °C: 6,4±0,3

- Change in condition

- Melting point/Melting range:** Undetermined.
- Boiling point/Boiling range:** Undetermined.

- Flash point: Not applicable.

- Flammability (solid, gaseous): Not applicable.

- Ignition temperature:

Decomposition temperature: Not determined.

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- Self-igniting:	Product is not selfigniting.
- Danger of explosion:	Product does not present an explosion hazard.
- Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
- Vapour pressure:	Not determined.
- Density at 25 °C:	1,45±0,01 g/cm ³
- Relative density	Not determined.
- Vapour density	Not determined.
- Evaporation rate	Not determined.
- Solubility in / Miscibility with water:	Soluble.
- Partition coefficient (n-octanol/water):	Not determined.
- Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
- Solvent content:	
Organic solvents:	0,0 %
Water:	46,4 %
Solids content:	53,6 %
- 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** Material is not reactive under normal conditions of use and storage
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** Reacts with strong oxidizing agents
- **10.4 Conditions to avoid** Low tempratures (under -10°C). Avoid high temperatures
- **10.5 Incompatible materials:** Keep substance away from: metals. metal powders.
- **10.6 Hazardous decomposition products:**
On burning: release of toxic and corrosive gases/vapours (phosphine, phosphorus oxides).
This reaction is accelerated on exposure to (some) acids.

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 relevant for classification:

13977-65-6 Monopotassium salt of Phosphorous acid

Oral	LD50	> 2000 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rat)

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- **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.
- **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.
- **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:**
LC50: >200 mg/l 96hr (Fish)
LC50 : 137.5 mg/l 72hr (Algae)
EC50: >200 mg/l 48hr (Daphnia magna)
- **12.2 Persistence and degradability** The material is inorganic and not subjected to biodegradation.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Do not allow undiluted product or large quantities of it to reach ground water, water course 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**
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **European waste catalogue** 06 03 14 Solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1 UN-Number**
- **DOT, ADR, ADN, IMDG, IATA** None

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- 14.2 UN proper shipping name - ADR, ADN, IMDG, IATA - DOT	None NOT REGULATED FOR ROAD TRANSPORTATION
- 14.3 Transport hazard class(es) - DOT, ADR, ADN, IMDG, IATA - Class	None
- 14.4 Packing group - ADR, ADN, IMDG, IATA	None
- 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.
- UN "Model Regulation":	None

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.
- Hazard pictograms



GHS07

- Signal word Warning
- Hazard statements
H319 Causes serious eye irritation.
- Precautionary statements
P264 Wash thoroughly after handling.
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.

SECTION 16: Other information

- Contact:
Regulatory Affairs Department
Tel: +972-4-8468255
msdsfc@icl-group.com
- 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)

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IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
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)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

- Disclaimer

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.

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