

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

Printing date 29.03.2021

Version number: 7

Revision date: 29.03.2021

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

- **1.1 Product identifier**
- **Trade name:** **13-40-13+TE**
- **Article number:**
MS-100085, 6113401301
MS-100552, 6113401312
- **1.2 Relevant identified uses of the substance or mixture and uses advised against** Water Soluble 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.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.03.2021

Version number: 7

Revision date: 29.03.2021

Trade name: 13-40-13+TE

(Contd. of page 1)

- P280 Wear 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.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Components:**

CAS: 7722-76-1 EINECS: 231-764-5	ammonium dihydrogenorthophosphate		50-75%
CAS: 7783-20-2 EINECS: 231-984-1	ammonium sulphate		2.5-10%
CAS: 57-13-6 EINECS: 200-315-5	urea		2.5-10%
CAS: 7757-79-1 EINECS: 231-818-8	potassium nitrate	⚠ Ox. Sol. 3, H272	10-25%
CAS: 14887-42-4 EINECS: 238-961-5	PeKacid	⚠ Eye Irrit. 2, H319	10-25%

- **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:** Do not leave affected persons unattended.
- **After inhalation:**
Take affected persons into fresh air and keep quiet.
Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
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:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting.
Never give an unconscious person anything to drink
Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** Irritating to eyes.

(Contd. on page 3)

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

Printing date 29.03.2021

Version number: 7

Revision date: 29.03.2021

Trade name: 13-40-13+TE

- 4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

(Contd. of page 2)

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
Use fire extinguishing methods suitable to surrounding conditions.
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Nitrogen oxides (NO_x)
Phosphorus oxides (e.g. P₂O₅)
Toxic metal compounds (K₂O)
Ammonia
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Use respiratory protective device against the effects of fumes/dust/aerosol.
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:**
Pick up mechanically.
Shovel or sweep up. Do not create a powder cloud by using a brush or compressed air.
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**
Keep receptacles tightly sealed.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of dust.
- **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.
Protect from heat and direct sunlight
Protect from humidity and water.

(Contd. on page 4)

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

Printing date 29.03.2021

Version number: 7

Revision date: 29.03.2021

Trade name: 13-40-13+TE

(Contd. of page 3)

- Information about storage in one common storage facility:

Do not store together with acids, alkalis, reducing agents, organic materials, flammable substances and combustible materials.

Incompatible with copper and its alloys.

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

- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- 8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace:
57-13-6 urea

WEEL (USA) 10 mg/m³
- DNELs For Ingredients:
- For workers:
7757-79-1 potassium nitrate

Dermal DNEL: Long-term-systemic effects(W) 20.8 mg/kg bw/day (())

Inhalative DNEL: Long-term-systemic effect(W) 36.7 mg/m³ (())

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/m³ (())

14887-42-4 PeKacid

Inhalative DNEL: Long-term-systemic effect(W) 4.07 mg/m³ (())

7783-20-2 ammonium sulphate

Dermal DNEL: Long-term-systemic effects(W) 42.7 mg/kg bw/day (())

Inhalative DNEL: Long-term-systemic effect(W) 11.2 mg/m³ (())

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/m³ (())

- For general population:
7757-79-1 potassium nitrate

Oral DNEL: Long-term-systemic effect(P) 12.5 mg/kg bw/day (())

Dermal DNEL: Long-term-systemic effect(P) 12.5 mg/kg bw/day (())

Inhalative DNEL: Long-term-systemic effect(P) 10.9 mg/m³ (())

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/m³ (())

14887-42-4 PeKacid

Inhalative DNEL: Long-term-systemic effect(P) 3.04 mg/m³ (())

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.03.2021

Version number: 7

Revision date: 29.03.2021

Trade name: 13-40-13+TE

(Contd. of page 4)

7783-20-2 ammonium sulphate

Oral	DNEL: Short-term-systemic effect(P)	6.4 mg/kg bw/day (())
Dermal	DNEL: Long-term-systemic effect(P)	12.8 mg/kg bw/day (())
Inhalative	DNEL: Long-term-systemic effect(P)	1.7 mg/m ³ (())

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 ³ (())

- PNECs
7722-76-1 ammonium dihydrogenorthophosphate

PNEC Aqua (freshwater):	1.7 mg/l (())
PNEC STP:	10 mg/l (())
PNEC aqua (intermittent releases):	17 mg/l (())
PNEC aqua (marine water):	0.17 mg/l (())

14887-42-4 PeKacid

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 (())

7783-20-2 ammonium sulphate

PNEC Aqua (freshwater):	0.312 mg/l (())
PNEC aqua (marine water):	0.0312 mg/l (())
PNEC STP:	16.2 mg/l (())
PNEC (Soil)	62.6 mg/kg (())

57-13-6 urea

PNEC Aqua (freshwater):	0.047 mg/l (())
PNEC aqua (marine water):	0.047 mg/l (())

7757-79-1 potassium nitrate

PNEC Aqua (freshwater):	0.45 mg/l (())
PNEC aqua (marine water):	0.045 mg/l (())
PNEC aqua (intermittent releases):	4.5 mg/l (())
PNEC STP:	18 mg/l (())

- Additional information:

Ventilation must be sufficient to maintain TLV-TWA below 3 mg/m³, respirable particles, and 10 mg/m³, inhalable particles [ACGIH recommendation for particles (insoluble or poorly soluble). Not Otherwise Specified (PNOS)]

- 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.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

(Contd. on page 6)

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

Printing date 29.03.2021

Version number: 7

Revision date: 29.03.2021

Trade name: 13-40-13+TE

(Contd. of page 5)

Avoid contact with the eyes and skin.

- Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

Filter P2

- Protection of hands:


Protective gloves

- 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 (EN 374)

- Not suitable are gloves made of the following materials: Leather gloves

- Eye protection:


Tightly sealed goggles

- Body protection:

Protective work clothing

Boots

- Limitation and supervision of exposure into the environment

The product should not get in high quantities into water because it may act as a plant nutrient and cause eutrophication.

- Risk management measures

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

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
- General Information
- Appearance:
Form: Crystalline powder

Colour: Off white or Blue according to specifications

- Odour: Characteristic

- pH-value (10 g/l) at 25 °C: 3.2

- Change in condition
Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: Undetermined.

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.03.2021

Version number: 7

Revision date: 29.03.2021

Trade name: 13-40-13+TE

(Contd. of page 6)

- Flash point:	Not applicable.
- Flammability (solid, gas):	Product is not flammable.
- Decomposition temperature:	Not determined.
- Auto-ignition temperature:	Product is not selfigniting.
- Explosive properties:	Product does not present an explosion hazard.
- Explosion limits:	
- Oxidising properties	None
- Vapour pressure:	Not determined.
- Density:	
- Bulk density at 25 °C:	0.75 kg/L
- Evaporation rate	Not applicable.
- Solubility in / Miscibility with water at 20 °C:	480 g/l
- Partition coefficient: n-octanol/water:	Not applicable This substance is an inorganic chemical.
- Viscosity:	Not applicable This product is solid. Viscosity is only relevant to liquids.
- 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No decomposition if used according to specifications.
- **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 various metals.
Reacts with strong acids and alkali.
Reacts with reducing agents.
- **10.4 Conditions to avoid**
To avoid decomposition do not overheat.
Store away from flammable substances.
Protect from moisture.
- **10.5 Incompatible materials:**
Acids, alkalis, reducing agents and combustible materials
Flammable materials.
Incompatible with copper and its alloys.
Sodium hypochlorite
Metals.
- **10.6 Hazardous decomposition products:**
Formation of toxic gases is possible during heating or in case of fire.
Nitrogen oxides (NO_x)
Phosphorus oxides (e.g. P₂O₅)
Toxic metal compounds (K₂O)

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.03.2021

Version number: 7

Revision date: 29.03.2021

Trade name: 13-40-13+TE

Ammonia

(Contd. of page 7)

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:

7757-79-1 potassium nitrate

Oral	LD50	3750 mg/kg (rat)
------	------	------------------

14887-42-4 PeKacid

Oral	LD50	>2000 mg/kg (rat) ((OECD 425))
------	------	--------------------------------

Dermal	LD50	>2000 mg/kg (rat) ((OECD 402))
--------	------	--------------------------------

7722-76-1 ammonium dihydrogenorthophosphate

Dermal	LD50	>5000 mg/kg (rat) ((OECD 402))
--------	------	--------------------------------

7783-20-2 ammonium sulphate

Dermal	LD50	>2000 mg/kg (rat)
--------	------	-------------------

57-13-6 urea

Oral	LD50	8471 mg/kg (rat)
------	------	------------------

- Primary irritant effect:

7757-79-1 potassium nitrate

Irritation of eyes	Irritation	not irritating (rabbit) (OECD 405, EC B.5)
--------------------	------------	--

14887-42-4 PeKacid

Irritation of skin	Irritation	not irritating (rabbit) (OECD 404)
--------------------	------------	------------------------------------

Irritation of eyes	Irritation	Irritating, cat2 (rabbit) (OECD 405)
--------------------	------------	--------------------------------------

7722-76-1 ammonium dihydrogenorthophosphate

Irritation of skin	Irritation	not irritating (rabbit) (equivalent to OECD 404)
--------------------	------------	--

Irritation of eyes	Irritation	not irritating (rabbit) (equivalent to OECD 405, EC B.5)
--------------------	------------	--

57-13-6 urea

Irritation of skin	Irritation	not irritating (rabbit) (OECD 404)
--------------------	------------	------------------------------------

Irritation of eyes	Irritation	not irritating (rabbit) (OECD 405, EC B.5)
--------------------	------------	--

- **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.

EU

(Contd. on page 9)

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

Printing date 29.03.2021

Version number: 7

Revision date: 29.03.2021

Trade name: 13-40-13+TE

(Contd. of page 8)

SECTION 12: Ecological information

- 12.1 Toxicity

- Aquatic toxicity:

7757-79-1 potassium nitrate

EC50	>1700 mg/l (algae) (10 days)
LC50/48h (static)	490 mg/l (daphnia magna)
LC50/96h	1378 mg/l (Fish) (OECD 203)

57-13-6 urea

LC50/24h	>10000 mg/l (daphnia magna)
LC50/96h	6810 mg/l (Fish)

7722-76-1 ammonium dihydrogenorthophosphate

LC50/24h	>1000 mg/l (daphnia magna)
LC50/96h (static)	>85.9 mg/l (fish Oncorhynchus mykiss) (OECD 203)

7783-20-2 ammonium sulphate

LC50/96h	53 mg NO ₃ - per lite (fish Oncorhynchus mykiss)
EC50 (static)	121.7 mg/l (daphnia magna) (48h)

14887-42-4 PeKacid

EC50/48h (static)	>100 mg/l (daphnia magna)
-------------------	---------------------------

- **12.2 Persistence and degradability** Inorganic product, therefore no biodegradation tests are applicable.

- **12.3 Bioaccumulative potential** Low potential for bioaccumulation (based on substance properties).

- **12.4 Mobility in soil** Low potential for adsorption (based on substance properties).

- Additional ecological information:

- General notes:

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

- 12.5 Results of PBT and vPvB assessment

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- 12.6 Other adverse effects

Product should not get in high quantities into waste water because it may act as a plant nutrient and cause eutrophication.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods

- Recommendation

This product is used as fertilizer. However, large spills can kill vegetation. Prevent large quantities from entering waterways. If uncontaminated, sweep up or collect, and reuse as product. If contaminated with other materials, collect in suitable containers and mark appropriately.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- Uncleaned packaging:

- Recommendation:

Packaging may be reused or recycled after cleaning.

Packaging that may not be cleansed are to be disposed of in the same manner as the product.

(Contd. on page 10)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.03.2021

Version number: 7

Revision date: 29.03.2021

Trade name: 13-40-13+TE

(Contd. of page 9)

Disposal must be made according to official regulations.

- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- 14.1 UN-Number

- DOT, ADR, IMDG, IATA None

- 14.2 UN proper shipping name None

- ADR, IMDG, IATA None

- 14.3 Transport hazard class(es) None

- DOT, ADR, ADN, IMDG, IATA None

- Class None

- 14.4 Packing group None

- ADR, ADN, IMDG, IATA None

- 14.5 Environmental hazards:

- Marine pollutant: No

- 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 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.

(Contd. on page 11)

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

Printing date 29.03.2021

Version number: 7

Revision date: 29.03.2021

Trade name: 13-40-13+TE

(Contd. of page 10)

- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 65
- **National regulations:**
- **Additional classification according to Decree on Hazardous Materials, Annex II:** None
- **Other regulations, limitations and prohibitive regulations**
- **Substances of very high concern (SVHC) according to REACH, Article 57** None

SECTION 16: Other information

- Contact:

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

- Abbreviations and acronyms:

TLV: Threshold Limit Value
TWA: Time Weighted Average
NOAEL: No Observable Adverse Effect Level
NOEC: No-Observed Effect Concentration
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
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 Harmonised System of Classification and Labelling of Chemicals
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
Ox. Sol. 3: Oxidizing solids – Category 3
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

- Reason for revision: Periodical review

- 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.

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.