

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

Printing date 30.11.2016

version 1

Revision: 30.11.2016

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

· **1.1 Product identifier**

· **Trade name:** Nova N-K

· **CAS Number:**

7757-79-1

· **EC number:**

231-818-8

· **Registration number** 01-2119488224-35

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

Fertiliser

No uses advised against.

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

· **Manufacturer/Supplier:**

Rotem Amfert Negev Ltd.

ICL Specialty Fertilizers

Mishor Rotem, Mobile Post Arava 86800

ISRAEL

Phone: +972-4-8468115

E-mail: Royie.Mashiah@icl-group.com

· **1.4 Emergency telephone number:** In Europe call: +31-20-5815100 (24 hours a day, 365 days a year)

SECTION 2: Hazards identification

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

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



GHS03 flame over circle

Ox. Sol. 3 H272 May intensify fire; oxidiser.

· **2.2 Label elements**

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

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

· **Hazard pictograms**



GHS03

· **Signal word** Warning

· **Hazard statements**

H272 May intensify fire; oxidiser.

· **Precautionary statements**

P221 Take any precaution to avoid mixing with combustibles.

P210 Keep away from heat. - No smoking.

P220 Keep/Store away from clothing/combustible materials.

P280 Wear protective gloves / eye protection / face protection.

P370+P378 In case of fire: Use for extinction: CO₂, powder or water spray.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

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· **vPvB:** Not applicable.

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SECTION 3: Composition/information on ingredients

- **3.1 Substances**
- **CAS No. Description**
7757-79-1 Potassium nitrate
- **EC number:** 231-818-8
- **SVHC** None

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If symptoms persist consult 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.
If symptoms persist consult doctor.
NOTE: Never give an unconscious person anything to drink.
- **4.2 Most important symptoms and effects, both acute and delayed** Methaemoglobinaemia
- **4.3 Indication of any immediate medical attention and special treatment needed** Medical supervision for at least 48 hours.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
The product is not flammable.
Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** None
- **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Nitrogen oxides (NO_x)
Toxic metal oxide smoke (K₂O)
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information** Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Avoid formation of dust.
Wear protective clothing.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

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- **6.3 Methods and material for containment and cleaning up:**
Pick up mechanically.
Dispose of the material collected according to regulations.
- **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**
Prevent formation of dust.
Ensure good ventilation/exhaustion at the workplace.
- **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 cool, dry place in tightly closed receptacles.
Keep only in the original container.
Store in a well-ventilated place.
Keep away from sources of ignition - No smoking.
- **Information about storage in one common storage facility:**
Do not store together with acids.
Do not store together with alkalis (caustic solutions).
Store away from reducing agents.
Store away from flammable substances.
- **Further information about storage conditions:** Protect from humidity and water.
- **7.3 Specific end use(s)** No further relevant information available.

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:** Not required.
- **DNELs**
For workers:
Long-term-systemic effects (dermal) DNEL: 20.8 mg/kg bw/day
Long-term-systemic effects (inhalation) DNEL: 36.7 mg/m³
For general population:
Long-term-systemic effects (dermal) DNEL: 12.5 mg/kg bw/day
Long-term-systemic effects (inhalation) DNEL: 10.9 mg/m³
Long-term-systemic effects (oral) DNEL: 12.5 mg/kg bw/day
- **PNECs**
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
- **8.2 Exposure controls**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.

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Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing
 Avoid contact with the eyes and skin.
 Do not eat, drink, smoke or sniff while working.
 Wash hands before breaks and at the end of work.

- **Respiratory protection:**

Use suitable respiratory protective device in case of insufficient ventilation.



Filter P2

- **Protection of hands:**



Protective gloves

- **Material of 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.

- **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)

- **Eye protection:**



Safety glasses

- **Body protection:** Protective work clothing

- **Limitation and supervision of exposure into the environment**

The product should not get in high quantities into waste 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 course 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: White

- **Odour:** Odourless

- **pH-value at 25 °C:** ca 7

- **Change in condition**

Melting point/Melting range: 334 °C

Boiling point/Boiling range: Not applicable

The substance decomposes before boiling

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- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Product is not flammable.
- **Ignition temperature:**
- **Decomposition temperature:** >400 °C
- **Self-igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:** None
- **Oxidising properties:** May intensify fire; oxidiser.
- **Vapour pressure:** Not applicable
- **Density at 20 °C:** 2,1 g/cm³
- **Solubility in / Miscibility with water at 25 °C:** >100 g/l
- **Partition coefficient (n-octanol/water):** Not applicable
This product is inorganic.
- **Viscosity:** 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 further relevant information available.
- **10.2 Chemical stability** No decomposition if used according to specifications.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**
Acts as an oxidising agent on organic materials such as wood, paper and fats.
Reacts with various metals.
Reacts with strong acids and alkali.
Reacts with reducing agents.
- **10.4 Conditions to avoid**
Protect from moisture.
Store away from flammable substances.
- **10.5 Incompatible materials:**
Acids
Alkalis
reducing agents
Keep away from combustible materials.
- **10.6 Hazardous decomposition products:**
Formation of toxic gases is possible during heating or in case of fire.
Nitrogen oxides
Toxic metal oxide smoke (K₂O)

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD/LC50 values relevant for classification:

Based on available data, the classification criteria are not met.

Oral	LD50	>2000 mg/kg bw (rat) (OECD 425)
Dermal	LD50	>5000 mg/kg bw (rabbit) (OECD 402)
Inhalative	LC50/4 h	>0,527 mg/l (rat) (OECD 403 (maximum achievable concentration))

Primary irritant effect:

Effect Species Method

Irritation of eyes	OECD 437	not irritant (in vitro)
	OECD 405, EC B.5	not irritant (rabbit)

6484-52-2 ammonium nitrate

Irritation of eyes	equivalent to OECD 404	not irritant (rabbit)
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7631-99-4 Sodium nitrate

Sensitisation	OECD 429, EC B.42	not sensitising (mouse)
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• **Skin corrosion/irritation:** Based on available data, the classification criteria are not met.

• **Serious eye damage/irritation:** Based on available data, the classification criteria are not met.

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

Toxicokinetics, metabolism and distribution

Low potential for bioaccumulation (based on substance properties)

For risk assessment purposes oral absorption is considered to be 50%, inhalation absorption 50% and dermal absorption 50%.

• **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

Germ cell mutagenicity

None

(acc. to OECD 476 and EC B.17)

Carcinogenicity:

no data available

(no carcinogenicity study needs to be performed as this substance is not genotoxic)

Toxicity for reproduction:

no classification is necessary

reproductive toxicity: NOAEL ≥ 1500 mg/kg bw/day ; rat; oral (OECD 422)

developmental toxicity: NOAEL ≥ 1500 mg/kg bw/day ; rat; oral (OECD 422)

maternal toxicity: NOAEL ≥ 400 mg/kg bw/day ; mouse; oral

• **STOT-single exposure** Based on available data, the classification criteria are not met.

STOT-repeated exposure

Oral	NOAEL	>1500 mg/kg bw (rat) (OECD 422, 28 days)
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Based on available data, the classification criteria are not met.

• **Aspiration hazard** Based on available data, the classification criteria are not met.

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SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

EC50/48 h (static)	490 mg/L (<i>Daphnia magna</i>)
LC50/96 h (static)	1378 mg/L (<i>Poecilia reticulata</i>) (equivalent to OECD 203)
EC50 (static)	> 1700 mg/L (algae) (10 d)

· **12.2 Persistence and degradability** The substance is inorganic; 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).

· General notes:

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

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

Disposal must be made according to official regulations.

· 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

· 14.1 UN-Number

· DOT, ADR, IMDG, IATA

UN1486

· 14.2 UN proper shipping name

· DOT

Potassium nitrate

· ADR

1486 POTASSIUM NITRATE

· IMDG, IATA

POTASSIUM NITRATE

· 14.3 Transport hazard class(es)

· DOT



· Class

5.1 Oxidising substances.

· Label

5.1

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· ADR



- Class 5.1 (O2) Oxidising substances.
- Label 5.1
- IMDG, IATA



- Class 5.1 Oxidising substances.
- Label 5.1
- 14.4 Packing group III
- DOT, ADR, IMDG, IATA III
- 14.5 Environmental hazards: No
- Marine pollutant: Warning: Oxidising substances.
- 14.6 Special precautions for user 50
- Danger code (Kemler): F-A,S-Q
- EMS Number: Not applicable.
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code UN 1486 POTASSIUM NITRATE, 5.1, III
- UN "Model Regulation":

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 substance is classified and labelled according to the CLP regulation.
- Hazard pictograms



GHS03

- Signal word Warning
- Hazard statements
H272 May intensify fire; oxidiser.
- Precautionary statements
P221 Take any precaution to avoid mixing with combustibles.
P210 Keep away from heat. - No smoking.
P220 Keep/Store away from clothing/combustible materials.
P280 Wear protective gloves / eye protection / face protection.
P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- Directive 2012/18/EU
- Seveso category OXIDISING LIQUIDS AND SOLIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 5000 t

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- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 10000 t
- **Registration status (Chemical Inventories listing) :**
 - Europe (EINECS) : listed
 - United States (TSCA) : listed
 - Canada (DSL) : listed
 - Australia (AICS) : listed
 - Japan (ENCS) : listed
 - Korea (KECI) : listed
 - Philippines (PICCS) : listed
 - China (IECSC) : listed
 - NTP (National Toxicology Program) : Substance is not listed
 - IARC (International Agency for Research on Cancer) : Substance is not listed
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

- **Relevant phrases** Contact with combustible material may cause fire.
- **Department issuing SDS:** Regulatory Affairs of ICL Fertilizers Products
- **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
 - 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
 - EINECS: European Inventory of Existing Commercial 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
 - Ox. Sol. 3: Oxidizing solids – Category 3

- **Disclaimer**

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