according to Regulation (EC) No. 1907/2006, as amended



Potassium nitrate

31263-1KG

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

1.1. Product identifier

Product name : Potassium nitrate

SDS-number : 000000020907

Type of product : Substance

Remarks : SDS according to Art. 31 of Regulation (EC) 1907/2006.

In accordance to the Article 14 (4) of the REACh Regulation

(EC) No 1907/2006, exposure estimation and risk

characterisation is not required.

Chemical name : Potassium nitrate

CAS-No. : 7757-79-1

REACH Registration

Number

: no data available

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

Use of the : Laboratory chemicals

Substance/Mixture

Uses advised against : none

1.3. Details of the supplier of the safety data sheet

Company : Honeywell International Inc. Honeywell International, Inc.

115 Tabor Road 115 Tabor Road

07950-2546 Morris Plains Morris Plains, NJ 07950-2546

USA USA

Telephone

For further information,

please contact:

SafetyDataSheet@Honeywell.com

1.4. Emergency telephone number

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Emergency telephone : +1-703-527-3887 (ChemTrec-Transport)

number +1-303-389-1414 (Medical)

: Poison Control Center:

United Kingdom: (+44) 844 892 0111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Oxidizing solids Category 3 H272 May intensify fire; oxidizer.

2.2. Label elements

REGULATION (EC) No 1272/2008

Hazard pictograms :

Signal word : Warning

Hazard statements : H272 May intensify fire; oxidizer.

Precautionary statements : P210 Keep away from heat, hot surfaces,

sparks, open flames and other ignition

sources. No smoking.

P280 Wear protective gloves/ eye protection/

face protection.

2.3. Other hazards

Oxidizer. Contact with other material may cause fire. The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical name	CAS-No. Index-No. REACH Registration Number EC-No.	Classification 1272/2008	Concentration	Remarks
Potassium nitrate	7757-79-1 231-818-8	Ox. Sol. 3; H272	100 %	

3.2. Mixtures

Not applicable

Occupational Exposure Limit(s), if available, are listed in Section 8. For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice:

Show this safety data sheet to the doctor in attendance.

Inhalation[.]

If inhaled, remove to fresh air. Consult a physician.

Skin contact:

After contact with skin, wash immediately with plenty of water.

Eye contact:

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Ingestion:

Rinse mouth with water. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

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No data available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

See Section 11 for more detailed information on health effects and symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Water spray Foam Carbon dioxide (CO2) Dry powder

Extinguishing media which shall not be used for safety reasons: High volume water jet

5.2. Special hazards arising from the substance or mixture

Heating will cause pressure rise with risk of bursting In fires, the product supports combustion.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. No unprotected exposed skin areas. In the event of fire and/or explosion do not breathe fumes.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Provide adequate ventilation. Do not breathe dust.

6.2. Environmental precautions

Should not be released into the environment.

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6.3. Methods and materials for containment and cleaning up

Use mechanical handling equipment.

Pick for disposal in tightly closed containers

Do not pick up with the help of saw-dust or other combustible substances.

6.4. Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling:

Exhaust ventilation at the object is necessary. Wear suitable protective clothing and gloves.

Advice on protection against fire and explosion:

Keep away from combustible material. The product itself does not burn.

Hygiene measures:

When using, do not eat, drink or smoke. Wash hands before breaks and at the end of workday. Keep working clothes separately. Remove and wash contaminated clothing before re-use.

7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions:

Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

no additional data available

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

DNEL/ PNEC-Values

No DNEL-data available.

No PNEC data available.

8.2. Exposure controls

Occupational exposure controls

The Personal Protective Equipment must be in accordance with EN standards:respirator EN 136, 140, 149; safety glasses EN 166; protective suit: EN 340, 463, 468, 943-1, 943-2; gloves EN 374, 511; safety shoes EN-ISO 20345.

Do not breathe dust.

Take off all contaminated clothing immediately.

Avoid contact with skin and eyes.

Engineering measures

Use with local exhaust ventilation.

Personal protective equipment

Respiratory protection:

Recommended Filter type:

P1

In the case of dust or aerosol formation use respirator with an approved filter.

Recommended Filter type:

Particulates type

Hand protection:

Glove material: Natural Latex

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Break through time: > 480 min Glove thickness: 0,6 mm

Lapren®706

Gloves must be inspected prior to use.

Replace when worn.

Remarks: Supplementary note: The specifications are based on information and tests from similar substances by analogy.

Due to varying conditions (e.g.temperature or other strains) it must be considered that the usage of a chemical protective glove in practice may be much shorter than the permeation time determined in accordance with EN 374.

Since actual conditions of practical use often deviate from standardised conditions according EN 374 the glove manufacturer recomends to use the chemical protective glove in practice not longer than 50% of the recomended permeation time.

Manufacturer's directions for use should be observed because of great diversity of types . Suitable gloves tested according EN 374 are supplied e.g. from KCL GmbH, D-36124 Eichenzell, Vertrieb@kcl.de

Eye protection:

Tightly fitting safety goggles

Skin and body protection:

Protective suit

Environmental exposure controls

Handle in accordance with local environmental regulations and good industrial practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

(a) Physical state : solid

(b) Colour : colourless

(c) Odour : odourless

(d) Melting point/freezing : 335 °C

point at 1.013 hPa

(e) Boiling point/boiling : Not applicable

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range Decomposition

(f) Flammability The product is not flammable.

(g) Lower and upper : Lower explosion limit

explosion limit Not applicable

Upper explosion limit

Not applicable

(h) Flash point : Not applicable

(i) Auto-ignition Not applicable

temperature not auto-flammable

: > 600 °C (j) Decomposition

temperature No decomposition if used as directed.

(k) pH : 5,5 - 7,5

Concentration: 50 g/l

at 20 °C

(I) Viscosity, kinematic Not applicable

(m) Solubility(ies) Water solubility:

> 357 g/l at 25 °C

(n) Partition coefficient: n-

octanol/water

Not applicable

(o) Vapour pressure Not applicable

(p) Density and / or relative : ca. 2,11 g/cm3

density

at 20 °C

(q) Bulk density : ca. 1.500 kg/m3

(q) Relative vapour density : No data available

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(r) Particle characteristics : No data available

9.2 Other Information

Oxidizing properties : The substance or mixture is classified as oxidizing with the

category 3.

Evaporation rate : No data available

Viscosity, dynamic : Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

No decomposition if stored and applied as directed.

10.2. Chemical stability

> 600 °C

No decomposition if used as directed.

10.3. Possibility of hazardous reactions

Decomposes on heating.

10.4. Conditions to avoid

Avoid contact with combustible material (paper, wool, oil). Keep away from combustible material.

10.5. Incompatible materials

Reactions with combustible substances.

Mixtures of inflammable substances are easily combustible and burn vigorously even under exclusion of air.

10.6. Hazardous decomposition products

Nitrous gases

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Oxygen

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

(a) Acute toxicity

Acute oral toxicity:

LD50

Species: Rat

Sex: male and female Value: > 2.000 mg/kg

Method: OECD Test Guideline 425

Acute dermal toxicity:

LD50

Species: Rat

Sex: male and female Value: > 5.000 mg/kg

Method: OECD Test Guideline 402

Acute inhalation toxicity:

LC50

Species: Rat

Sex: male and female Value: > 0,527 mg/l Exposure time: 4 h

Method: OECD Test Guideline 403

An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration.

Acute toxicity (other routes of administration):

No data available

(b) Skin corrosion/irritation:

No data available

(c) Serious eye damage/eye irritation:

Species: Bovine cornea Result: No eye irritation Classification: non-irritant Exposure time: 4 h

Method: OECD Test Guideline 437

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(d) Respiratory or skin sensitisation:

No data available

(e) Germ cell mutagenicity:

Test Method: Ames test

Metabolic activation: with and without metabolic activation

Result: negative

Cell type: mammalian cells

Result: negative

Cell type: Chinese hamster fibroblasts

Result: negative

(f) Carcinogenicity:

Note: No data available

(g) Reproductive toxicity:

Species: Rat - wistar - male and female

Route of Application: Oral

Dose: >=1500 mg/kgGeneral Toxicity - Parent: NOAEL:

(h) STOT-single exposure:

No data available

(i) STOT - repeated exposure:

Species: Rat

Application Route: Oral Exposure time: 28 d

NOAEL

NOAEL>= 1.500 mg/kg

Method: OECD Test Guideline 422

(j) Aspiration hazard:

No data available

11.2. Information on other hazards

Endocrine disrupting properties No data available

Other information:

No experimental information on genotoxicity in vitro available.

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SECTION 12: Ecological information

12.1. Toxicity

Toxicity to fish:

LC50

Species: Poecilia reticulata (guppy)

Value: 1.378 mg/l Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to aquatic plants:

EC50

Species: Algae Value: > 1.700 mg/l Exposure time: 240 h

Toxicity to aquatic invertebrates:

EC50

Species: Daphnia magna (Water flea)

Value: 490 mg/l Exposure time: 48 h

12.2. Persistence and degradability

Biodegradability: Not applicable

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

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12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

Do not flush into surface water.

The methods for determining biodegradability are not applicable to inorganic substances.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product:

Dispose according to legal requirements.

Packaging:

Legal requirements are to be considered in regard of reuse or disposal of used packaging materials

Further information:

Provisions relating to waste:

EC Directive 2006/12/EC; 2008/98/EEC

Regulation No. 1013/2006

For personal protection see section 8.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID:1486 IMDG:1486 IATA:1486

14.2 UN proper shipping name

ADR/RID:POTASSIUM NITRATE IMDG:POTASSIUM NITRATE

IATA: Potassium nitrate

14.3 Transport hazard class(es)

ADR/RID:5.1 IMDG: 5.1 IATA: 5.1

14.4 Packaging group

ADR/RID:III IMDG: III IATA: III

14.5 Environmental hazards

ADR/RID:no Marine pollutant: no

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14.6 Special precautions for user

No data available

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Basis	Value	Remarks
Substances of very high concern (SVHC)		This product does not contain substances of very high concern according to Regulation (EC) No Article 57 above the respective regulatory 1907/2006 (REACH), concentration limit of ≥ 0.1 % (w/w).
Regulation (EU) 2019/1148 on the marketing and use of explosives precursors		Contains components listed in

Other inventory information

US. Toxic Substances Control Act On TSCA Inventory

Australia. Inventory of Industrial Chemicals (AIIC), as amended On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL) All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List
On the inventory, or in compliance with the inventory

Korea. Existing Chemicals Inventory (KECI)
On the inventory, or in compliance with the inventory

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Philippines. Inventory of Chemicals and Chemical Substances (PICCS) On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC) On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory (TCSI)
On the inventory, or in compliance with the inventory

15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Text of H-statements referred to under heading 3

Potassium nitrate : H272 May intensify fire; oxidizer.

Further information

All directives and regulations refer to amended versions.

Vertical lines in the left hand margin indicate a relevant amendment from the previous version.

Abbreviations:

EC European Community

CAS Chemical Abstracts Service

DNEL Derived no effect level

PNEC Predicted no effect level

vPvB Very persistent and very biaccumulative substance

PBT Persistent, bioaccmulative und toxic substance

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific Page 15 / 16

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material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user.

This information should not constitute a guarantee for any specific product properties.