according to Regulation (EC) No. 1907/2006



# Potassium perchlorate

60440-1KG

Version 1.1 Revision Date 30.04.2017

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

1.1. Product identifier

Product name : Potassium perchlorate

SDS-number : 000000020263

Type of product : Substance

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

Chemical name : potassium perchlorate

Index-No. : 017-008-00-5

REACH Registration : no data available

Number

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 :

Telefax

For further information, : PMTEU Product Stewardship: please contact: SafetyDataSheet@Honeywell.com

1.4. Emergency telephone number

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

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

Country based Poison

Control Center

: see chapter 15.1

# **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

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## REGULATION (EC) No 1272/2008

Oxidizing solids Category 1 H271 May cause fire or explosion; strong oxidizer. Acute toxicity Category 4 - Oral H302 Harmful if swallowed.

# 2.2. Label elements

# REGULATION (EC) No 1272/2008

Hazard pictograms

Signal word Danger

Hazard statements H271 May cause fire or explosion; strong

oxidizer.

Harmful if swallowed. H302

Keep away from heat, hot surfaces, Precautionary statements P210

sparks, open flames and other ignition

sources. No smoking.

P280 Wear protective gloves/protective

clothing/eye protection/face protection.

P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT

induce vomiting.

IF exposed or concerned: Get medical P308 + P313

advice/ attention.

#### 2.3. Other hazards

Explosive when mixed with combustible material.

# **SECTION 3: Composition/information on ingredients**

# 3.1. Substance

Chemical name	CAS-No. Index-No. REACH Registration Number EC-No.	Classification 1272/2008	Concentration	Remarks
potassium perchlorate	7778-74-7 017-008-00-5 231-912-9	Ox. Sol. 1; H271 Acute Tox. 4; H302	<= 100 %	1*

<sup>1\* -</sup> For specific concentration limits see Annexes of 1272/2008

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#### 3.2. Mixture

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:

First aider needs to protect himself. Move out of dangerous area. Show this safety data sheet to the doctor in attendance.

#### Inhalation:

If inhaled, remove to fresh air. If symptoms persist, call a physician.

#### Skin contact:

Wash off 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:

A person suspected to have swallowed the substance who is conscious should be given water to drink. Take to a doctor immediately together with this card

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

no data available

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

no data available

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

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# **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media: Water spray jet 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

Fire or intense heat may cause violent rupture of packages.

In fires, the product supports combustion.

The product itself does not burn.

#### 5.3. Advice for firefighters

Personal protection through wearing a tightly closed chemical protection suit and a self-contained breathing apparatus.

No unprotected exposed skin areas.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

## SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment. Unprotected persons must be kept away.

# 6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Clean contaminated floors and objects thoroughly while observing environmental regulations.

#### 6.3. Methods and materials for containment and cleaning up

Take up mechanically and collect in suitable container for disposal.

Protect from contamination.

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.

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# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Advice on safe handling:

Wear personal protective equipment. Exhaust ventilation at the object is necessary. Never return unused material to storage receptacle. Protect from contamination. Do not heat the product. Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion:

The product is not flammable. Fire or intense heat may cause violent rupture of packages.

#### Hygiene measures:

Separate rooms are required for washing, showering and changing clothes. Contaminated work clothing should not be allowed out of the workplace. Keep working clothes separately. When using, do not eat, drink or smoke.

## 7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions:

Store in original container. Store away from incompatible substances. Do not leave vessels/containers open Containers should be protected against falling down. Avoid product residues in/on containers. Store in a place accessible by authorized persons only.

Advice on common storage:

Do not store with combustible materials.

#### 7.3. Specific end use(s)

no additional data available

#### **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.

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## 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, safety shoes EN-ISO 20345.

#### **Engineering measures**

Use with local exhaust ventilation.

# Personal protective equipment

Respiratory protection:

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

Hand protection:

Glove material: Nitrile rubber Break through time: > 480 min Glove thickness: 0,11 mm

Dermatril® P743

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 reccomends 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:
Wear suitable protective equipment.
Lightweight protective clothing
Lab coat

# **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

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Form : crystalline

Colour : white

Odour : odourless

Melting point/range : > 400 °C

Decomposes before melting.

Boiling point/boiling range : Not applicable

Decomposes on heating.

Flash point : Not applicable

Flammability (solid, gas) : The product is not flammable.

Ignition temperature : Not applicable

Auto-ignition temperature : not auto-flammable

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

category 1.

Lower explosion limit : Not applicable

Upper explosion limit : Not applicable

Vapour pressure : negligible

Density : 2,52 g/cm3

at 20 °C

Bulk density : no data available

Viscosity, dynamic : Not applicable

Viscosity, kinematic : Not applicable

pH : no data available

Water solubility : 7,9 g/l

at 0 °C

Water solubility : 13,7 g/l

at 10 °C

Water solubility : 18 g/l

at 20 °C

Water solubility : 201 g/l

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at 100 °C

Partition coefficient: n-

octanol/water

: Not applicable

9.2 Other Information

no additional data available

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No decomposition if stored and applied as directed.

## 10.2. Chemical stability

> 400 °C

Decomposes before melting.

No decomposition if used as directed.

# 10.3. Possibility of hazardous reactions

Decomposes on heating.

#### 10.4. Conditions to avoid

Protect from heat/overheating.

Protect from contamination.

To avoid thermal decomposition, do not overheat.

Keep away from combustible material.

# 10.5. Incompatible materials

Reactions with combustible substances.

Reactions with metals in powder form.

As oxidising agent, attacks organic substances such as wood, paper, fats.

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

# 10.6. Hazardous decomposition products

Oxygen

## **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

Acute oral toxicity:

LD50

according to Regulation (EC) No. 1907/2006

# Honeywell

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Species: Mouse Value: 3.621 mg/kg

Classification based on Annex VI of regulation 1272/2008/EC.

Acute dermal toxicity: no data available

Acute inhalation toxicity: no data available

Skin irritation: no data available

Eye irritation: no data available

Respiratory or skin sensitisation:

no data available

Repeated dose toxicity:

Species: Rat, male and female

Application Route: Oral Exposure time: 90 d NOAEL: 1 mg/kg bw/day

Test substance: REACH dossier "read-across"

Test Method: Chromosome aberration test

Species: Rat, male and female

Cell type: Bone marrow Application Route: Oral

Test substance: REACH dossier "read-across"

Result: negative

Aspiration hazard: no data available

Other information: no data available

# **SECTION 12: Ecological information**

# 12.1. Toxicity

Toxicity to fish: no data available

Toxicity to aquatic plants:

no data available

according to Regulation (EC) No. 1907/2006



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Toxicity to Microorganisms:

no data available

Toxicity to aquatic invertebrates:

no data available

## 12.2. Persistence and degradability

no data available

## 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

# 12.6. Other adverse effects

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**

ADR/RID

UN Number : 1489

Description of the goods : POTASSIUM PERCHLORATE

Class : 5.1

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Packaging group : II
Classification Code : O2
Hazard Identification : 50

Number

ADR/RID-Labels : 5.1 Environmentally hazardous : no

**IATA** 

UN Number : 1489

Description of the goods : Potassium perchlorate

Class : 5.1
Packaging group : II
Hazard Labels : 5.1

**IMDG** 

UN Number : 1489

Description of the goods : POTASSIUM PERCHLORATE

Class : 5.1
Packaging group : II
Hazard Labels : 5.1
EMS Number : F-H, S-Q

Marine pollutant : no

# **SECTION 15: Regulatory information**

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

# **Poison Control Center**

Phone Number
+4314064343
070 245245
(+)35929154233
(+3851)23-48-342
no data available
+420224919293; +420224915402
82121212
16662; (+372)6269390
9471977
+33(0)145425959
no data available
(+36-80)201-199
5432222

Country	Phone Number
Latvia	+37167042473
Liechtenstein	no data available
Lithuania	+370532362052
Luxembourg	070245245; (+352)80002-5500
Malta	no data available
Netherlands	030-2748888
Norw ay	22591300
Poland	no data available
Portugal	808250143
Romania	no data available
Slovakia (NTIC)	+421 2 54 774 166
Slovenia	no data available
Spain	+34915620420

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  reland	+353(1)8092166
Italy	no data available
	Berlin : 030/19240
	Bonn : 0228/19240
	Erfurt: 0361/730730
Germany	Freiburg : 0761/19240
Comany	Göttingen : 0551/19240
	Homburg: 06841/19240
	Mainz: 06131/19240
	Munich: 089/19240

Sw eden	112 (begär Giftinformation);+46104566786	
United Kingdom	no data available	

# Other inventory information

US. Toxic Substances Control Act

On TSCA Inventory

Australia. Industrial Chemical (Notification and Assessment) Act 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

Japan. Industrial Safety & Health Law (ISHL) List On the inventory, or in compliance with the inventory

Korea. Toxic Chemical Control Law (TCCL) List On the inventory, or in compliance with the inventory

Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances 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

# 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

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## **SECTION 16: Other information**

#### Text of H-statements referred to under heading 3

potassium perchlorate : H271 May cause fire or explosion; strong oxidizer.

H302 Harmful if swallowed.

#### **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.

#### Abreviations:

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

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