

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : Cobalt(II) perchlorate hexahydrate

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

According to Regulation (EC) No1272/2008

Oxidizing solids (Category 2)

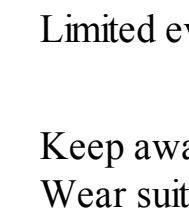
Carcinogenicity (Category 2)

According to European Directive 67/548/EEC as amended.

Contact with combustible material may cause fire. Limited evidence of a carcinogenic effect.

### Label elements

Pictogram



Signal word

Danger

Hazard statement(s)

H272

May intensify fire; oxidiser.

H351

Suspected of causing cancer.

Precautionary statement(s)

P220

Keep/Store away from clothing/ combustible materials.

P281

Use personal protective equipment as required.

Hazard symbol(s)

O

Oxidising

Xn

Harmful

R-phrase(s)

R8

Contact with combustible material may cause fire.

R40

Limited evidence of a carcinogenic effect.

S-phrase(s)

S17

Keep away from combustible material.

S36/37

Wear suitable protective clothing and gloves.

Other hazards - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Cobaltous perchloratehexahydrate

Formula : Cl<sub>2</sub>CoO<sub>8</sub> · 6H<sub>2</sub>O

Molecular Weight : 365,93 g/mol

CAS-No.	EC-No.	Classification	Concentration
13478-33-6	236-653-5	Ox. Sol. 2; Carc. 2; H272, H351 O, Xn, R 8 - R40	-

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

### If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## 5. FIRE-FIGHTING MEASURES

### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

### Further information

Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

Evacuate personnel to safe areas.

### Environmental precautions

Do not let product enter drains.

### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition -

No smoking. Keep away from combustible material.

### Conditions for safe storage

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

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Personal protective equipment

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Handle with gloves.

#### Eye protection

Safety glasses with side-shields conforming to EN166

#### Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form Crystals with lumps

### Safety data

pH no data available

Melting point no data available

Boiling point no data available

Flash point not applicable

Ignition temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Water solubility no data available

## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Conditions to avoid

no data available

### Materials to avoid

Organic materials, Powdered metals

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Hydrogen chloride gas, Cobalt/cobalt oxides

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

LD50 Intraperitoneal - mouse - 160 mg/kg

### Skin corrosion/irritation

no data available

### Serious eye damage/eye irritation

no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

Limited evidence of carcinogenicity in animal studies

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Cobalt(II) perchlorate hexahydrate)

### Reproductive toxicity

no data available

### Specific target organ toxicity - single exposure

no data available

### Specific target organ toxicity - repeated exposure

no data available

### Aspiration hazard

no data available

### Potential health effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed. May cause skin irritation.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

### Additional Information

RTECS: CC2075000

RETECS: BG2973000

## 12. ECOLOGICAL INFORMATION

### Toxicity

no data available

### Persistence and degradability

no data available

### Bioaccumulative potential

no data available

### Mobility in soil

no data available

### PBT and vPvB assessment

no data available

### Other adverse effects

no data available

## 13. DISPOSAL CONSIDERATIONS

### Product

Dispose all federal, state, and local environmental regulations. Contact a licensed professional waste

in a chemical incinerator equipped with an afterburner and scrubber.

### Contaminated packaging

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

### ADR/ RID

UN-Number: 1481 Class: 5.1

Packing group: II

Proper shipping name: PERCHLORATES, INORGANIC, N.O.S. (Cobalt(II) perchlorate hexahydrate)

EMS-No: F-H, S-Q

Marine polluting name: PERCHLORATES, INORGANIC, N.O.S.

Packing group: II

Proper shipping name: Perchlorates, inorganic, n.o.s.

## 15. REGULATORY INFORMATION

### This safety data sheet complies with the requirements of Regulation (EC) No. 907/2006.