1. Identification of the substance/preparation and of the company/undertaking

Identification of the product
Cobalt(II) sulfate heptahydrate
Manufacturer/supplier identification

Company: Guangdong Guanghua Sci-Tech Co.,Ltd

Address: No.295 Daxue Road, Shantou

PostCode:515000

E-mail: export@ghtech.com

Emergency telephone No.: +86-754-82515813.

Fax No.: +86-754-88221999

2. Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Acute toxicity, Oral (Category 4) Respiratory sensitisation (Category 1) Carcinogenicity (Category 1B) Reproductive toxicity (Category 1B)

Acute aquatic toxicity (Category 1) Chronic aquatic toxicity (Category 1)

Label elements

Pictogram







Signal word Danger

Hazard statement(s)

H302 Harmful if swallowed.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H350 May cause cancer.

H360 May damage fertility or the unborn child.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P203 Obtain, read and follow all safety instructions before use.

P233 Keep container tightly closed.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P284 Wear respiratory protection.

P301 + P317 IF SWALLOWED: Get medical help.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P318 IF exposed or concerned, get medical advice.

P330	Rinse mouth.
P342 + P316	If experiencing respiratory symptoms: Get emergency medical help immediately.
P391	Collect spillage.
P403	Store in a well-ventilated place.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal

Supplemental Hazard Statements

none

3. Composition/information on ingredients

Synonyms

Cobalt(II) sulfate heptahydrate

CAS-No.: 10026-24-1 *M*: 281.10 g/mol

Molecular formula: CoSO₄·7H₂O

4. First aid measures

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.

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

6. Accidental release measures

Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

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

7. Handling and storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage

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

8. Exposure controls and personal protection

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

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

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains. Discharge into the environment must be avoided.

9. Physical and chemical properties

Form: crystals

Colour: Red with yellow-brown

Odour: not available pH value: not available Melting point: 98°C

Boiling point: not available

Ignition temperature: not available

Flash point: not available

Autoignition temperature: not available

Explosion limits

lower: not available **upper:** not available **Density:** 1.95 g/cm³

Bulk density: not available

Solubility in

water (20 °C): soluble in water. diluted acids (20 °C): not available Thermal decomposition: not available

10. Stability and reactivity

Chemical stability

no data available

Conditions to avoid

no data available

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Sulphur oxides, Cobalt/cobalt oxides

11. Toxicological information

Acute toxicity

LD50 Oral - Rat - 582 mg/kg

Remarks: Behavioral: Somnolence (general depressed activity). Behavioral: Ataxia. Diarrhoea

Skin corrosion or irritation

no data available

Serious eye damage or eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

IARC: 2B - Group 2B: Possibly carcinogenic to humans

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

12. Ecological information

Toxicity

no data available

Persistence and degradability

Biodegradability Biotic/Aerobic

Result: - Not readily biodegradable

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

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. Transport information

ADR/RID

UN-Number: 3077 Class: 9 Packing group: III

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Cobalt(II)

sulfate heptahydrate)

IMDG

UN-Number: 3077 Class: 9 Packing group: III

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Cobalt(II)

sulfate heptahydrate) Marine pollutant: yes

IATA

UN-Number: 3077 Class: 9 Packing group: III

Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Cobalt(II) sulfate heptahydrate)

15. Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

16. Other information

General update.

Regional representation:

This information is given on the authorised Safety Data Sheet for your country.