

Cobalt (Ous) Nitrate CAS No 10026-22-9

# MATERIAL SAFETY DATA SHEET SDS/MSDS

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

1.1 Product identifiers

Product name : Cobalt (Ous) Nitrate

CAS-No. : 10026-22-9

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : Pallav Chemicals & Solvents Pvt. Ltd

253, Shiv Shakti Industrial Estate, Opp Mittal Estate Andheri Kurla Road, Andheri (E), Mumbai - 400050

**INDIA** 

Telephone : +91 22 4928 4000

Email : sales@pallavchemicals.com

1.4 Emergency telephone number

Emergency Phone # : +91 22 4928 4000 (9:00am - 6:00 pm) [Office hours]

# **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Oxidizing solids (Category 2), H272
Acute toxicity, Oral (Category 4), H302
Respiratory sensitisation (Category 1), H334
Skin sensitisation (Category 1), H317
Germ cell mutagenicity (Category 2), H341
Carcinogenicity, Inhalation (Category 1B), H350i
Reproductive toxicity (Category 1B), H360F
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

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

# 2.2 Label elements

## Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word Danger

Hazard statement(s)

H272 May intensify fire; oxidizer. H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

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

H341 Suspected of causing genetic defects. H350i May cause cancer by inhalation.

H360F May damage fertility.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P201 Obtain special instructions before use.

P210 Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

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

protection.

P284 Wear respiratory protection.

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

breathing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Supplemental Hazard none

Statements

Restricted to professional users.

#### 2.3 Other hazards

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.

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

#### 3.1 Substances

S-No.

Synonyms : Cobaltous nitrate

Formula : CoN2O6 ⋅ 6H2O

Molecular weight : 291,03 g/mol

CAS-No. : 10026-22-9

# Hazardous ingredients according to Regulation (EC) No 1272/2008

Component Classification Concentration

**Cobaltous nitrate**, **hexahydrate** Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)

10026-22-9 Ox. Sol. 2; Acute Tox. 4; <= 100 % Resp. Sens. 1; Skin

Sens. 1;

Muta. 2; Carc. 1B; Repr. 1B; Aquatic Acute 1; Aquatic Chronic 1; H272, H302, H334, H317, H341, H350i, H360F,

H400, H410

Concentration limits:

>= 0,01 %: Carc. 1B, H350i; M-Factor - Aquatic Acute: 10 -

Aquatic Chronic: 10

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

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#### **SECTION 4: First aid measures**

## 4.1 Description of 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

Flush eyes with water as a precaution.

#### If swallowed

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

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

# 4.3 Indication of any immediate medical attention and special treatment

needed No data available

# **SECTION 5: Firefighting measures**

# 5.1 Extinguishing media

#### Suitable extinguishing media

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

# 5.2 Special hazards arising from the substance or

mixture Nitrogen oxides (NOx), Cobalt/cobalt oxides

# 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

Use water spray to cool unopened containers.

#### **SECTION 6: Accidental release measures**

# 6.1 Personal precautions, protective equipment and emergency procedures

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

For personal protection see section 8.

#### 6.2 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.

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

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

# 6.4 Reference to other sections

For disposal see section 13.

#### **SECTION 7: Handling and storage**

#### 7.1 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. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition.

For precautions see section 2.2.

# 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Oxidizing hazardous materials

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# **SECTION 8: Exposure controls/personal protection**

# 8.1 Control parameters

Components with workplace control parameters

# 8.2 Exposure controls

# Appropriate engineering controls

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

## Personal protective equipment

# Eye/face protection

Face shield and safety glasses 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.

#### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

# 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).

## Control of environmental exposure

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

# **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

a) Appearance Form: crystalline

Colour: red

b) Odour
c) Odour Threshold
d) pH
No data available
4.0 at 100 g/l at 20

d) pH 4,0 at 100 g/l at 20 °C
 e) Melting point/freezing Melting point/range: 55 °C - lit.

point

f) Initial boiling point and No data available

boiling range

g) Flash point Not applicable
h) Evaporation rate No data available
i) Flammability (solid, gas) No data available

j) Upper/lower No data available

flammability or explosive limits

k) Vapour pressure No data availablel) Vapour density No data available

m) Relative density 1,88 g/cm3n) Water solubility soluble

o) Partition coefficient: n- No data available

octanol/water

p) Auto-ignition No data available

temperature

q) Decomposition No data available

temperature

r) Viscosity No data availables) Explosive properties No data available

Oxidizing properties The substance or mixture is classified as oxidizing with the category 2.

# 9.2 Other safety information

Bulk density 8.000 kg/m3

# **SECTION 10: Stability and reactivity**

# 10.1 Reactivity

No data available

## 10.2 Chemical stability

Stable under recommended storage conditions.

# 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

Heat Exposure to moisture

# 10.5 Incompatible materials

Organic materials, Reducing agents

# 10.6 Hazardous decomposition products

Other decomposition products - No data available In the event of fire: see section 5

# **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

# **Acute toxicity**

LD50 Oral - Rat - 691 mg/kg

LD50 Oral - Rat - 434 mg/kg

Remarks: anhydrous

# Skin corrosion/irritation

No data available

# Serious eye damage/eye irritation

No data available

# Respiratory or skin sensitisation

No data available

# Germ cell mutagenicity

In vitro tests showed mutagenic effects No data available

# Carcinogenicity

Carcinogenicity - Rabbit

Tumorigenic: Tumors at site or application.

Possible human carcinogen

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Cobaltous nitrate, hexahydrate)

2B - Group 2B: Possibly carcinogenic to humans (Cobaltous nitrate, hexahydrate)

# Reproductive toxicity

No data available

Presumed human reproductive toxicant

# Specific target organ toxicity - single exposure

No data available

# Specific target organ toxicity - repeated exposure

No data available

#### **Aspiration hazard**

No data available

#### **Additional Information**

RTECS: QU7355500

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

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

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.

# 12.6 Other adverse effects

Very toxic to aquatic life.

No data available

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

# Contaminated packaging

Dispose of as unused product.

## **SECTION 14: Transport information**

#### 14.1 UN number

ADR/RID: 1477 IMDG: 1477 IATA: 1477

# 14.2 UN proper shipping name

ADR/RID: NITRATES, INORGANIC, N.O.S. (Cobaltous nitrate, hexahydrate) IMDG: NITRATES, INORGANIC, N.O.S. (Cobaltous nitrate, hexahydrate)

IATA: Nitrates, inorganic, n.o.s.

#### 14.3 Transport hazard class(es)

ADR/RID: 5.1 IMDG: 5.1 IATA: 5.1

14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

14.5 Environmental hazards

ADR/RID: yes IMDG Marine pollutant: yes IATA: no

#### 14.6 Special precautions for user

No data available

## **SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

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

#### Authorisations and/or restrictions on use

Cobaltous nitrate, hexahydrate CAS-No.: 10026-22-9

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

Carcinogenic (article 57a)

ED/95/2010

Cobaltous nitrate, hexahydrate CAS-No.: 10026-22-9

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous

substances, preparations and articles (Annex XVII)

Carcinogens: category 1B Restricted to professional users.

See Annex XVII to Regulation (EC) no 1907/2006 for Conditions of restriction

#### 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

# **SECTION 16: Other information**

#### Full text of H-Statements referred to under sections 2 and 3.

H272	May intensify fire; oxidizer.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341	Suspected of causing genetic defects.
H350i	May cause cancer by inhalation.
H360F	May damage fertility.
H400	Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.

#### **Further information**

H410

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Pallav Chemicals & Solvents Pvt. Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.pallavchemicals.com for additional terms and conditions of sale.