



# POTASSIUM CYANATE CAS NO 590-28-3

# MATERIAL SAFETY DATA SHEET SDS/MSDS

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

1.1 Product identifiers

Product name : Potassium Cyanate

CAS-No. : 590-28-3

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 : Central Drug House (P) Ltd

7/28 Vardaan House New Delhi -110002

INDIA

Telephone : +91 11 49404040

Email : <u>care@cdhfinechemical.com</u>

1.4 Emergency telephone number

Emergency Phone # : +91 11 49404040 (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

Acute toxicity, Oral (Category 4), H302 Eye irritation (Category 2), H319

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 Warning

Hazard statement(s)

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

Precautionary statement(s)

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard

Statements

none

### 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

Formula : KOCN

Molecular weight : 81.12 g/mol

CAS-No. : 590-28-3

EC-No. : 209-676-3

Index-No. : 615-016-00-9

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

Component Classification Concentration

Potassium cyanate

CAS-No. 590-28-3 Acute Tox. 4; Eye Irrit. 2; <= 100 %

EC-No. 209-676-3 H302, H319

Index-No. 615-016-00-9

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

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.

### 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

Carbon oxides, Nitrogen oxides (NOx), Potassium oxides

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

No data available

### 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. 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

Pick up and arrange disposal without creating dust. Sweep up and shovel. 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.

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): Non Combustible Solids

### 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

### 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

Safety glasses with side-shields conforming to EN166 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

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle r (US) or type ABEK-P2 (EU EN 143) respirator cartridges. 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: powder, Chunks

Colour: white

b) Odour odourless

Odour Threshold No data available No data available d) Melting point/freezing No data available

point

No data available

Initial boiling point and

boiling range

g) Flash point No data available h) Evaporation rate No data available

Flammability (solid, gas) The product is not flammable. - Flammability (solids) i)

Upper/lower j) flammability or explosive limits

No data available

No data available k) Vapour pressure Vapour density No data available I) 2.056 g/cm3 at 25 °C m) Relative density n) Water solubility No data available

o) Partition coefficient: noctanol/water

No data available

p) Auto-ignition temperature No data available

q) Decomposition temperature

No data available

r) Viscosity No data available s) Explosive properties No data available Oxidizing properties No data available

#### 9.2 Other safety information

No data available

### **SECTION 10: Stability and reactivity**

#### Reactivity 10.1

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

No data available

# 10.5 Incompatible materials

Strong oxidizing agents

#### 10.6 **Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Potassium oxides

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 - female - 567 mg/kg(Potassium cyanate)

(Directive 67/548/EEC, Annex V, B.1.)

LD50 Dermal - Rat - male and female - > 2,000 mg/kg(Potassium cyanate)

(OECD Test Guideline 402)

### Skin corrosion/irritation

Skin - Rabbit(Potassium cyanate) Result: No skin irritation - 4 h (OECD Test Guideline 404)

### Serious eye damage/eye irritation

Eyes - Rabbit(Potassium cyanate)

Result: Irritating to eyes. (OECD Test Guideline 405)

### Respiratory or skin sensitisation

No data available(Potassium cyanate)

### Germ cell mutagenicity

Hamster(Potassium cyanate)

fibroblast

Result: negative

# Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

# Reproductive toxicity

No data available(Potassium cyanate)

### Specific target organ toxicity - single exposure

No data available(Potassium cyanate)

# Specific target organ toxicity - repeated exposure

No data available

### **Aspiration hazard**

No data available(Potassium cyanate)

## **Additional Information**

RTECS: GS6825000

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

### **SECTION 12: Ecological information**

### 12.1 Toxicity

Toxicity to fish static test LC50 - Salmo gairdneri - 15 mg/l - 96 h(Potassium cyanate)

(Directive 67/548/EEC, Annex V, C.1.)

Toxicity to daphnia and

static test EC50 - Daphnia magna (Water flea) - 18 mg/l - 48 h(Potassium cyanate)

other aquatic invertebrates

cyanal

Toxicity to bacteria Respiration inhibition EC50 - Sludge Treatment - > 1,000 mg/l - 3 h(Potassium

cyanate)

(OECD Test Guideline 209)

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available(Potassium cyanate)

### 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

Harmful to aquatic life.

# **SECTION 13: Disposal considerations**

### 13.1 Waste treatment methods

### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

### Contaminated packaging

Dispose of as unused product.

### **SECTION 14: Transport information**

### 14.1 UN number

ADR/RID: - IMDG: - IATA: -

### 14.2 UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

### 14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

### 14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

### 14.5 Environmental hazards

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

# 14.6 Special precautions for user

No data available

### **SECTION 15: Regulatory information**

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

# 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.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

### **Further information**

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. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.