

## 1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No. : P 12129

Product Name : POTASSIUM DICHROMATE

Manufacturer/supplier identification

Company : NICE Chemicals (P) Ltd., Cochin, India

Tel - 0484 2800212, 2802755

Contact for information : Tel. No.- 0484 2802536 Fax : 0484 2802483 Emergency Telephone No. : 0484 2801583 Tele fax No. : 0484 2802483

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS-No : 7778-50-9 Ec-Index No. : 024-002-00-6

Molar Mass : ---- EC-No. : 231-906-6

Molecular formula :  $Cr K_2O_2$ 

### 3. HAZARDS INDEX :

May cause cancer by inhalation. May cause heritable genetic damage. Also harmful in contact with skin. Also toxic if swallowed. Also very toxic by inhalation. Irritating to respiratory system and skin. Risk of serious damage to eyes. May cause sensitization by skin contact. Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

Restricted to professional users. Attention - Avoid exposure - obtain special instructions before use.

# 4. FIRST AID MEASURES :

After inhalation: Fresh air. Summon doctor if necessary.

After skin contact: wash off with plenty of water. Remove contaminated clothing.

After eye contact: rinse out with plenty of water, with the eyelid held wide open.

Summon eye specialist.

After swallowing: make victim drink plenty of water, induce vomiting.

Immediately summon doctor.

General information: Carefully clean wounds and cover with sterile dressing

material.

### 5. FIRE-FIGHTING MEASURES:

Suitable extinguishing media: Water, foam.

Special risks: A fire-promoting effect must be considered possible when large

amounts of the substance are stored.

Special protective equipment for fire fighting: Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing

Other information: Non-combustible. Prevent fire-fighting water from entering apparatus.



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surface water or ground water. Cool container with spray water from a save distance.

## 6. ACCIDENTAL RELEASE MEASURES

Person-related precautionary measures:

Avoid inhalation of dusts in all circumstances. Avoid substance contact

Procedures for cleaning/absorption: Carefully take up dry. Foprward for disposal.

Clean up affected area. Avoid generation of dusts.

Environmental-protection measures: Do not allow to enter sewerage system.

## 7. HANDLING AND STORAGE

Handling: No further requirements.

Storage : Tightly closed. Dry. In a well-ventilated place.

Storage temperature: No restrictions Accessible only for authorized persons.

### 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Personal protective equipment:

Respiratory protection: Required when dusts are generated.

Eye protection: Required Hand protection: Required

Protective clothing should be selected specifically for the working place, depending on concentration & quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Industrial hygiene: Immediately change contaminated clothing. Apply skin-protective barrier cream. Wash hands and face after working with substance.

## 9. PHYSICAL & CHEMICAL PROPERTIES

Form : Solid Colour : Orange Odour : Odourless

pH value at  $50 \text{gm/lt.H}_2\text{O}(20^{\circ}\ \text{C})$ :  $\sim 4$  Melting temperature :  $398\,^{\circ}\ \text{C}$  Boiling temperature :  $>500\,^{\circ}\ \text{C}$  Ignition temperature : Not available

Flash Point : Not available Explosion limit lower : Not available

upper : Not available Relative vapour density : Not available Density  $(20^{\circ} \text{ C})$  :  $2.69 \text{gm/cm}^3$  Bulk Density :  $\sim 1300 \text{ km/m}^3$ 



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Solubility in Water ( $20^{\circ}$  C) : 120 gm/lt. Thermal decomposition : >500  $^{\circ}$  C

#### 10. STABILITY & REACTIVITY

Conditions to be avoided: Strong heating

Substances to be avoided: Organic combustible substances, anhydrides, hydrazine & derivatives, hydroxylamine, sulfides/water, reducing agents, conc. sulphuric acid, conc. sulphuric acid/ hydrochloric acid, glycerol, boron, iron, magnesium, metals in powder form.

Hazardous decomposition products: No information available.

#### 11. TOXICOLOGICAL INFORMATION

Acute toxicity: LD<sub>50</sub> (oral, rat): 95 mg/kg;

The literature data available to us do not conform with the labeling prescribed by the

EC. The EC has dossiers which have not been published.

Subacute to chronic toxicity: Animal experiments performed under conditions comparable with the workplace situation have shown the substance to be carcinogenic.

Further toxicological information:

Inhalable chromium (VI) compounds:

After inhalation: Absorption.

Burns in mucous membrances. Damage to nasal mucosal (possibly perforation of the septum). Irritations in the under airways.

After skin contact: being a strong oxidant, the substance can cause burns and ulcerations. Poor tendency for ulcers to heat following penetration of substance into the wound. Risk of sensitization.

After eye contact: Burns.

After swallowing: Burns. Severe symptoms in the gastrointestinal tract, such as bloody diarhoea, vomiting (aspiration pneumonia!), spasms, unconsciousness, circulatory collapse.

Systemic effects: After absorption formation of methaemoglbinaemia,

damage to liver and kidneys may occur.

Further data: This substance should be handled with particular care.

## 12. ECOLOGICAL INFORMATION

Behavior in environmental compartments: Evaluation number (FRG)(bacteria): 6; Evaluation number (FRG) (fish): 3.2; Evaluation number (FRG) (mammal): 5;

Ecotoxix effect: Biological effects: Highly toxic for aquatic organisms. May cause long-term adverse effects in the aquatic environment.



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Fish rtoxicity: L.idus LC<sub>50</sub>: 272 mg/lt.; P.promelas LC<sub>50</sub>: 17.6 mg/lt.;

Gambusia affinis LC<sub>50</sub> : 140 mg/lt. /96 hrs.;

Daphnia toxicity: Daphnia magna LC<sub>50</sub>: 0.89 mg/lt.

Further ecologic data: Do not allow to enter waters, waste water, or soil!

The literature data available to us do not conform with the labeling prescribed by the EC. The EC has dossiers which have not been published.

#### 13. DISPOSAL METHOD

There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

## 14. TRANSPORT INFORMATION:

GGVS/GGVE class : 6.1 Number and letter : 65c

Transport over land ADR/RID class : 6.1 Number and letter : 65c

ADR/RID & GGVS/GGVE: Name of material: POTASSIUM DICHROMATE

Sea Transport IMDG : IMDG class : 6.1 UN No. : 3288 Packing group : III

Ems : 6.1 - 04 MFAG : 4.2

Correct Technical Name: POTASSIUM DICHROMATE

Air Transport ICAO-TI

and IATA-DGR: ICAO/IATA class: 6.1 UN No.: 3288

Packaging group : III

Correct Technical Name: POTASSIUM DICHROMATE

### 15. REGULATORY INFORMATION

Labeling according to EC Directives

Symbol : T+ Very toxic

N Dangerous for the environment

R-phrases: 49-46-21/26-37/ May cause cancer by inhalation. May cause heritable genetic

38-41-43-50/53 damage. Also harmful in contact with skin. Also toxic if

swallowed. Also very toxic by inhalation. Irritating to respiratory system and skin. Risk of serious damage to eyes.



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May cause sensitization by skin contact. Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic

environment.

S-phrases: 53-45-60-61 Avoid exposure-obtain special instructions before use. In case of

accident or if you feel unwell, seek medical advice immediately (show the label where possible). This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/Safety data sheets.

EC-No. : 231-906-6 EC label

Water pollution class: 3 (highly polluting substance)

## 16. OTHER INFORMATION:

Reason for alteration

Change in labeling

General update.

Addition in the chapter toxicology.

Addition in the chapter ecology.

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.