

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

Catalogue No. : S 75830

Product Name : SULPHURIC ACID A.R.

Manufacturer/supplier identification

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

Tel - 0484 2800212, 2802755

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### 2. COMPOSITION/INFORMATION ON INGREDIENTS

## **Hazardous Ingredients:**

Name according to EC Directives: Sulphuric Acid

Hazard symbols : C R-phrases : 35

Ec-Index No. : 016-020-00-8 Causes severe burns. CAS NO. : 7664-93-9 Content : 95 -97 %

### 3. HAZARDS INDEX

Causes severe burns.

## 4. FIRST AID MEASURES

After inhalation: fresh air. Summon doctor

After skin contact: wash off with plenty of water. Dab with polyethylene glycol 400. Immediately remove contaminated clothing.

After eye contact: rinse out with plenty of water for at least 10 minutes with the eyelid held wide open. Immediately summon eye specialist.

After swallowing: make victim drink plenty of water, (if necessary several litres), avoid vomiting (risk of perforation). Immediately summon doctor. Do not attempt to neutralize

### 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: In adaption to materials stored in the immediate neighbourhood.

Special risks: Development of hazardous combustion gases or vapours possible in the

event of fire.

Hydrogen may form upon contact with metals (danger of explosion). The following may develop in event of fire: sulphur oxides.



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

Other information: Non-combustible.

### 6. ACCIDENTAL RELEASE MEASURES

Person - related precautionary measures : Avoid substance contact.Do not inhale vapours/aerosols.

Procedures for cleaning/absorption: Take up with liquid-absorbent material (e.g. Chemizorb).

Forward for disposal. Clean up affected area.

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

Additional notes: Render harmless: Neutralize with diluted Sodium Hydroxide solution or by throwing on lime, lime sand, or Sodium Carbonate.

# 7. HANDLING AND STORAGE

Handling - No further requirements.

Storage - Tightly closed.

Storage temperature: No restrictions.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory protection: required when vapours/ aerosols are generated.

Eye Protection : required Hand Protection : required

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

Other protective equipment: Acid-resistant protective clothing.

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form : liquid
Colour : colourless
Odour : odourless
pH value (20° C) : Strongly Acid

Viscosity dynamic (20 ° C) : 26.9 mPa\*s.

Melting temperature : -15 ° C

Boiling temperature : 330 ° C

Ignition temperature : Not available



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Flash Point : Not applicable

Explosion limit lower : Not available

upper : Not available

Vapour pressure (20 ° C) : ~0.0001 hPa Relative vapour density : Not available Density (20 ° C) : 1.84 gm/cm<sup>3</sup>

Solubility in Water (20 ° C) : Caution! development of heat.

## 10. STABILITY AND REACTIVITY

Conditions to be avoided: Strong heating

Substances to be avoided: water, alkali metals, alkali compounds, ammonia alkaline & metals, alkaline earth compounds, alkalis, acids, metals, metal alloys, phosphorus oxides, hydrides, halogen-halogen compounds, oxy halogenic compounds, carbides, permanganates, nitrates, combustible substances, organic solvents, acettlidene, nitriles, organic nitro compounds, anilines, peroxides, picrates, nitrides, lithium silicide.

Hazardous decomposition products: in the event of fire: sulphur oxides

Further information: hygroscopic; has a corrosive effect; incompatible with metals, animal/vegetable tissues.

### 11. TOXICOLOGICAL INFORMATION

Acute toxicity: LD<sub>50</sub> (oral, rat): 2140 mg/kg; LD<sub>50</sub> (inhalation, rat): 510 mg/m<sup>3</sup>/2 h (Using 25% solution); (calculated on the pure substance);

Toxicologic values are not available due to other dangerous properties of the substance.

Further toxicological information:

After inhalation of aerosols: damage to the affected mucous memberanes.

After skin contact: Severe burns with formation of scabs.

After eye contact: Burns. Corneal lesions.

After swallowing: Severe pain (risk of perforation!), nausea, vomiting and diarrhoea.

After a latency period of several weeks possibly pyloric stenosis.

Further data :

The product should be handled with the care usual when dealing with chemicals.

#### **12. ECOLOGICAL INFORMATION**:

Behavior in environmental compartments:

Evaluation number (FRG) (fish) : 3.1(calculated on the pure substance);

Ecotoxic effects:



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Biological effects: Toxic for aquatic organisms. Harmful effect due to pH shift. Toxic dffect on fish & algae. Caustic even in diluted form. Does not cause biological oxygen deficit. Endangers drinking-water supplies if allowed to enter soil and/or waters in large quantities. Neutralization possible in waste water treatment plants.

#### 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

Transport over land

ADR/RID and GGVS/GGVE: GGVS/GGVE class: 8 Number and letter: 1b

ADR/RID class: 8 Number and letter: 1b

Name of material: SULPHURIC ACID

Sea Transport IMDG : IMDG class: 8 UN No.: 1830 Packing group: II

Ems: 8-06 MFAG: 700

Correct Technical Name: SULPHURIC ACID

Air Transport ICAO-TI

and IATA-DGR: ICAO/IATA class: 8 UN No.: 1830

Packaging group: II

Correct Technical Name: SULPHURIC ACID

### 15. REGULATORY INFORMATION

Labelling according to EC Directives

Symbol : C Corrosive

R-phrases : 35 Causes severe burns.

S-phrases : 26-30-45 In case of contact with eyes, rinse immediately with plenty

of water & seek medical advice. Never add water to this

product. In case of accident or if you feel unwell, seek medical

advice immediately (show the label where possible).

EC No. : 231-639-5 EC label

Water pollution class: 1 (slightly polluting substance)



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# **16. OTHER INFORMATION**

Reason for alteration

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.