

# 1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No. : A 20389

Product Name : ACETIC ACID SOLUTION 5%

Manufacturer / supplier identification

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

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# 2. COMPOSITION / INFORMATION ON INGREDIENTS

CAS-No : 64-19-7

Ec-Index No. : 607-002-00-6 EC-No. : 200-580-7 Molecular Formula :  $C_2H_4O_2$ 

**3. HAZARDS IDENTIFICATION** : Flammable . Causes severe burns.

# 4. FIRST AID MEASURES

After inhalation: Fresh air. consult doctor if feeling unwell

After skin contact: Wash off with plenty of water.

Remove contaminated clothing

After eye contact: Rinse out with plenty of water if pain persists

consult an eye specialist

After swallowing: Make victim drink plenty of water. Induce vomiting.

consult doctor if feeling unwell. Do not attempt to neutralize.

### 5. FIRE - FIGHTING MEASURES

Suitable extinguishing media: Water, foam, powder, CO<sub>2</sub>

Special risks: combustible. Ambient fire may liberate hazardous vapours.

The following may develop in the event of fire: Acetic acid vapours.

Keep away from sources of ignition.



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Other information: Prevent fire fighting water from entering surface water or ground water. Take measures to prevent electrostatic charging.

Special protective equipment for fire fighting: Do not stay in dangerous zone without self contained breathing apparatus.

# 6. ACCIDENTAL RELEASE MEASURES

Procedures for cleaning/absorption: Take up with liquid absorbent material. Forward for disposal. Clean up affected area.

Person-related precautionary measures: Do not inhale vapours/aerosols. Avoid substance contact. Ensure supply of fresh air in enclosed rooms. Environmental protection measures: Do not allow to enter sewage system.

# 7. HANDLING AND STORAGE

Handling: Take measures to prevent electrostatic charging.

Storage: Tightly closed. Dry. In a well ventilated place. Keep away

from sources of ignition and heat. At +15  $^{0}$  C to +25  $^{0}$  C.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment:

Respiratory protection: Required when vapours/aerosols are generated.

Eye protection : Required Hand protection : Required

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



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Industrial hygiene: Change contaminated clothing. Application of skin protective barrier cream recommended. Wash hands after working with substance.

#### 9. PHYSICAL & CHEMICAL PROPERTIES

Form : Liquid
Colour : Colourless
Odour : Characteristic

pH value at 10 g/l  $H_2O$  (20 $^{0}$  C ) : ~ 2.5 Melting temperature :  $17~^{0}$  C Boiling temperature :  $118~^{0}$  C Ignition temperature :  $485~^{0}$  C Flash point :  $40~^{0}$  C Explosion limits lower :  $4~^{0}$  Vol %

Upper : 17 Vol %

Relative vapour density : Not available Density  $(20^{0} \, \text{C})$  :  $1.05 \, \text{g/cm}^{3}$  Solubility in water  $(20^{0} \, \text{C})$  : Soluble

# 10. STABILITY AND REACTIVITY

Conditions to be avoided: Strong heating. Temperatures  $< 0^0$  C Substance to be avoided: Anhydrides/water, aldehydes, alcohols, halogenhalogen compounds, oxidising agent (CrO<sub>3</sub>, potassium permanganate, peroxi compounds, perchloric acid, chromosulfuric acid), metals, alkali hydroxides, non-metallic halides, ethanolamine.

Hazardous decomposition products:

In the event of fire: acetic acid vapours.

Further information: inflammable, incompatible with various metals; explosible with air in a vaporous / gaseous state.



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### 11. TOXICOLOGICAL INFORMATION

Acute toxicity : LD <sub>50</sub> (oral, rat): 3310 mg/Kg

LD <sub>50</sub> (dermal, rabbit): 1113 mg/Kg

Further toxicological information: Strongly corrosive substance.

After inhalation: Irritation symptoms in the respiratory tract.

Pneumonia bronchitis. Inhalation may lead to the formation of

odemas in the respiratory tract.

After skin contact: Burns.

After eye contact: Burns, Risk of blindness! Risk of corneal clouding. Burns

of mucous membrane.

After swallowing: burns in the oesophagus and stomach, gastric spasms, bloody vomiting, dyspnoea. Risk of perforation in the oesophagus and stomach. Pulmonary failure possible after aspiration of vomit. Cannot be excluded: shock, cardiovascular failure, acidosis. Damage of kidneys.

#### 12. ECOLOGICAL INFORMATION

Biologic degradation: Biological degrability: good (> 70%). Easily eliminable.

Behaviour in environmental compartments: Distribution: log P(oct):-0.31;

No bioaccumulation is to be expected (log P(o/w<1))

Evaluation number (FRG) (bacteria): 2.6; Evaluation number (FRG) (fish):

34; Evaluation number (FRG) (mammal): 1;

Ecotoxic effects: biologic effects: Toxic for aquatic organisms. Harmful effect due to pH shift. Caustic event in diluted form. Fish toxicity: L.idus

LC<sub>50</sub>: 410mg/l Anthropods: Daphnia magna LC<sub>50</sub>: 47mg/l/24h

 $Bacterial\ toxicity:\ Ps.pitida\ EC_5: 2850\ mg/l (maximum\ permissible$ 

concentration) Algeal toxicity: Sc.quadricauds EC<sub>5</sub>: 4000 mg/l

(maximum permissible concentration) Protozoa:

E.sulcatum EC<sub>5</sub>: 78 mg/l(maximum permissible concentration)

Further ecologic data: BOD<sub>5</sub>: 0.88 g/g

BOD 36% of ThOD /5d:

Do not allow to enter waters, waste waters or soil.



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### 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 as 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: 32b

ADR/RID class : 8 Number and letter : 32b

Name of material : ACETIC ACID GLACIAL

River transport AND/ADNR: Not examined

Sea transport IMDG : IMDG class : 8 UN -No. : 2789 Packaging group : II

Ems : 8-04 MFAG : 700

Correct technical name : ACETIC ACID GLACIAL

Air transport

ICAO-TI and IATA-DGR: ICAO/IATA class: 8/3 UN/ID-No.: 2789 Packaging group: II

Correct technical name: ACETIC ACID GLACIAL



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# 15. REGULATORY INFORMATION

Labelling according to EC Directives

Symbol : C Corrosive

R- Phrases : 10-35 Flammable . causes severe burns.

S-phrases : 23-26-45 Do not breathe vapour. In case of contact with eyes, rinse

immediately with plenty of water and seek medical advice

immediately ( shoe the label where possible)

Water pollution class : 1 (slightly polluting substance)

# 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.