

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No. : I 10517

Product Name : IMIDAZOLE

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

Synonyms:

Glyoxaline, 1,3-Diaza- 2,4-cyclopentadiene

CAS-No : 288-32-4 EC-Index-No.: -----

Molar mass : ---- M : 68.08 g/mol Molecular Formula : $C_3H_4N_2$ EC $-N_0$: 206-019-2

(Hill)

Chemical formula : ----- Formula Hill : -----

3. HAZARDS IDENTIFICATION : Harmful if swallowed .

4. FIRST AID MEASURES : 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 inhalation: fresh air. Summon doctor.

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.

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5. FIRE – FIGHTING MEASURES: Suitable extinguishing media:.

powder, foam, CO₂, water.

Special risks: Combustible. Development of hazardous combustion

gases or vapours possible in the event of fire.

The following may develop in event of fire: nitrous gases.

Special protective equipments for fire fighting: Do not stay in

dangerous zone without self-contained breathing apparatus.

Other information: Contain escaping vapours with water. Prevent

fore-fighting water from entering surface water or ground water.

6. ACCIDENTAL RELEASE MEASURES: Person -related precautionary measures: Avoid generation of dusts;

do not inhale dusts. Avoid substance contact.

Environmental -protection measures:

Do not allow to enter sewerage system.

Procedures for cleaning/absorption: Take up dry. Forward for disposal.

Clean up effected area. Avoid generation of dusts.

7. HANDLING AND STORAGE: Handling: No further requirements.

Storage: Tightly closed. Dry. At $+ 15^{\circ}$ C to $+ 25^{\circ}$ C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment

Respiratory protection: required when dusts are generated.

Eye protection : required Hand protection : required



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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.

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 : Solid

Colour : Colourless to yellow

Odour : Amine -like

pH value at $50 \text{ g/l H}_2\text{O}$: 9.5-11.0

Melting temperature: $90\text{-}91^{\circ}$ CBoiling temperature: 256° CIgnition temperature: 480° CFlash point: 135° C

Explosion limits lower : Not available

Upper : Not available

Vapour pressure $(132^{\circ}C)$: 0.003 hPa Density : Not available Bulk density : 500-600 kg/m³

Solubility in water(20°C) : 250 g/l

Ethanol : Freely soluble

Ether : Soluble

Log P(oct): \cdot -0.

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10. STABILITY AND REACTIVITY: Conditions to be avoided: Heatind.

Substance to be avoided : Acids

Hazardous decomposition products: In the event of fire: See chapter 5.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: LD₅₀ (oral, rat): 220 mg/kg

Specific symptoms in animal studies:

Skin irritation test (rabbit) : Burns.

Eye irritation test (rabbit) : Severe irritations.

Subacute to chronic toxicity:

Bacterial mutagenicity : Ames- Test : negative.

Further toxicological information:

After skin contact : Burns.

After eye contact : Burns.

After inhalation of dust: Burns of mucous membranes.

After swallowing: Burns in mouth, throat, oesophagus and

gastrointestinal tract.

Further data: Further hazardous properties cannot be excluded.

The product should be handled with the care usual when dealing

with chemicals.

12. ECOLOGICAL INFORMATION

Biologic degradation : Biodegradation: > 70% Zahin-Wellens test.

Readily eliminable (DOC reduction >70%).

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Behaviour in environmental compartments:

Distribution: Log P(o/w): 0.02;

No bioaccumulation is to be expected (logP(o/w < 1)).

Ecotoxic effects:

Biological effects:

Fish toxicity : L.idus LC $_{50}$: 100-500 mg/l /48 h; Bacterial toxicity : Bacteria EC $_{50}$: 1200 mg/l/17 h. Daphnia toxicity : Daphnia EC $_{50}$: 5 mg/l/48 h;

Algeal toxicity : Algae IC₅₀: 130 mg/l/72 h;

Further ecologic data:

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

13. DISPOSAL METHOD

: Chemicals must be disposed of in compliance with the respective national regulations. Under www. retrologestik. de you will find

country- and substance-specific information as well as contact partners.

Nice product packaging must be disposed of in compliance with the country- specific regulations or must be passed to a packaging return system. Under www. retrologistik.de you will find special information on the respective national conditions as well as contact partners.

14. TRANSPORT INFORMATION

GGVS/GGVE class: 8 Number and letter: 55c

Transport over land ADR/RID class: 8 Number and letter: 55c

ADR/RID and GGVS/GGVE Name of materia 1: AETZENDER BASISCHER ORGANISCHER

FESTER STOFF, N.A.G. (IMIDAZOL)



Product Name : IMIDAZOLE

Sea transport IMDG : IMDG class : 8 UN-No. : 3263 Packaging group: 111

EMS : 8-15 MFAG : 760

Correct technical name: CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (IMIDAZOLE)

Air transport ICAO-TI ICAO/IATA class : 8 UN/ID-No. : 3263

and IATA-DGR : Packaging group: 111

Correct technical name : CORROSIVE SOLID, BASIC, ORGANIC,

N.O.S.(IMIDAZOLE)

15. REGULATORY INFORMATION

Labelling according to EC Directives

Symbol : C Corrosive

R-phrases : 22-34 Harmful if swallowed. Causes burns.

S-phrases : 22-26-36/37/39-45 Do not breathe dust. In case of contact with eyes, rinse

immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately(show the label where possible).

Water pollution class : ----

16. OTHER INFORMATION

Reason for alteration

Change/addition in the chapter 5.

Change in the chapter on toxicology.

Change in the chapter on ecology.

General update.

Regional representation:

The information is given on the authorised Safety Data Sheet for your country.

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