

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No. : H 10725

Product Name : HYDROQUINONE

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: 1,4-Dihydroxybenzene,Quinol

3. HAZARDS IDENTIFICATION : Harmful if swallowed . Limited evidence of a carcinogenic effect.

Risk

of serious damage to eyes. May cause sensitisation by skin contact. Very

toxic to aquatic organisms. Possible risks of irreversible effects.

4. FIRST AID MEASURES: 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 inhalation: fresh air.

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

Summon doctor.

Product Name : HYDROQUINONE

5. FIRE – FIGHTING MEASURES : Suitable extinguishing media : Powder, foam, CO₂, water.

Special risks: Combustible. Danger of dust explosion. Development of hazardous combustion gases or vapours possible in the event of fire.

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

Other information: 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.

7. HANDLING AND STORAGE: Handling: Notes for safe handling: Work under hood. Do not inhale substance. Protect from light. Keep hermetically sealed.

Storage: Tightly closed. Dry. Protect from light. 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



Product Name : HYDROQUINONE

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 white
Odour : Almost odourless

pH value at 70g/l H₂O (20° C) : 3.75 Melting temperature : 172° C Boiling temperature : 287° C Ignition temperature : 516° C

Flash point : 165° C c.c.

Explosion limits lower : Not available

Upper : Not available

Vapour pressure (132°C) : 1.3 hPa

(65 °C) : 0.13 hPa

Density (20° C) : 1.35 g/cm^3 Bulk density : 600 kg/m^3

Solubility in water(25°C) : 70 g/l

Ethanol (20°C) : Freely soluble Ether (20°C) : Freely soluble

Ether (20 $^{\circ}$ C) : Freely solub Thermal decomposition : > 170 $^{\circ}$ C

Log P(oct): : 0.59



Product Name : HYDROQUINONE

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

Substance to be avoided : Strong oxidizing agents, alkalis. Hazardous decomposition products : No information available.

Further information: Light –sensitive; sublimable; strong reducing agent: Dust explosion possible; Explosible with air in a vapours/gaseous state when heated.

11. TOXICOLOGICAL INFORMATION : Acute toxicity : LD₅₀ (oral, rat) : 320 mg/kg

LC₅₀(oral, human) : 29 mg/kg.

Subacute to chronic toxicity

The carcinogenic potential requires further clarification. Possible mutagenic effect in humans. The suspicion is bases on proven damage to the genetic material in the somatic cells of man and animal and requires further clarification.

Further toxicological information:

After skin contact: Slight irritations. Risk of skin sensitisation.

After eye contact : Risk of serious damage to eyes. Risk of corneal

clouding.

After inhalation: Irritations of the mucous membranes, coughing,

and dyspnoea.

Possible damages: Pulmonary oedema (latency time until onset of

action.).

After swallowing:

Nausea, vomiting, diarrhoea, dyspnoea, cyanosis, collapse.

Further data : The product should be handled with the care usual

when dealing with chemicals.



Product Name : HYDROQUINONE

12. ECOLOGICAL INFORMATION

Biologic degradation: Readily biodegradable(reduction: DOC > 70%;

BOD >60%; BOD 5 to COD >50%).

Behavior in enviorinmental compartmens:

Distribution: Log P(o/w): 0.59;

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

Ecotoxic effects: Biological effects: Highly toxic for aquatic organisms. High aquatic toxicity. Formation of health –hazardous mixtures possible with water. Hazard for drinking water supplies.

Fish toxicity: L.idus LC₅₀: 0.15 mg/l; Br. Rerio LC₅₀: 0.17 mg/l;

Bacterial toxicity: Ps.putida EC₀: 58 mg/l; E.coli EC₀: 50 mg/l;

Daphnia toxicity : Daphnia magna LC₅₀ : 0.1 mg/l; Algeal toxicity : Sc.quadricauda EC₀: 0.93 mg/l;

M. aeruginosa EC_0 : 1.1 mg/l;

Protozoa : E.sulcatum EC_0 : 11 mg/l;

Further ecologic data : BOD : 0.62 g/g;

TOD: 1.89 g/g; BOD 25 % from TOD/5 d; 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.



Product Name : HYDROQUINONE

14. TRANSPORT INFORMATION

Transport over land

ADR/RID and GGVS/GGVE

GGVS/GGVE class : 6.1 Number and letter : 14c

ADR/RID class : 6.1 Number and letter : 14c

Name of materia 1 : HYDROCHINON

Sea transport IMDG : IMDG class : 6.1 UN-No. : 2662 Packaging group : 111

EMS : 6.1-0 MFAG : 710

Correct technical name : HYDROQUINONE

Air transport ICAO-TI : ICAO/IATA class: 6.1 UN/ID-No.: 2662 Packaging group: 111

and IATA-DGR Correct technical name : HYDROQUINONE

15. REGULATORY INFORMATION

Labelling according to EC Directives

Symbol : Xn Harmful

N Danerous for the environment.

R-phrases : 22-40-41-43-50-68 Harmful if swallowed. Limited evidence of a

carcinogenic effect. Risk of serious damage to eyes. May cause sensitisation by skin contact. Very toxic to aquatic organisms. Possible

risks of irreversible effects.

S-phrases : 26-36/37/39-61 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. Avoid release to the

environment. Refer to special instructions/

safety data sheets.



Product Name : HYDROQUINONE

EC-No. : 204-617-8 EC label

Water pollution class : ----

16. OTHER INFORMATION

Change in labelling.

Change/addition in the chapter 8. Specific control parameter.

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.