



SAFETY DATA SHEET

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No. : G 20129
Product Name : GLUTARALDEHYDE 50%

Manufacturer / supplier identification
Company : NICE Chemicals (P) Ltd. , Cochin , India
Tel - 0484 2800212 , 2802755

Contact For Information : Tel . No. – 0484 2802536 Fax : 0484 2802483
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2. COMPOSITION / INFORMATION ON INGREDIENTS

Aqueous solution.

Hazardous ingredients :

Name according to EC Directives:

CAS-No	EC-Index-No.	EC -No.	Classification	content
111-30-8	605-022-00-X	203-856-5	T;R23/25, N;R50 C; R34 & R 42/43	Glutaraldehyde 50%

(Full text of R-Phrases in heading 16)

3. HAZARDS IDENTIFICATION

Harmful if swallowed . Toxic by inhalation. Causes burns. May cause sensitisation by inhalation and skin contact. Very toxic to aquatic organisms.

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 call in ophtalmologist..

After inhalation: fresh air. Call in physician.

After swallowing : make victim drink plenty of water(if necessary several litres), avoid vomiting(risk of perforation). Immediately call in physician.



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Do not attempt to neutralize.

- 5. FIRE – FIGHTING MEASURES:** Suitable extinguishing media : In adaption to materials stored in the immediate neighbourhood..
- Special risks : Non-combustible. Ambient fire may liberate hazardous vapours.
- Special protective equipments for fire fighting: Do not stay in dangerous zone without self-contained breathing apparatus.
- Other information: Prevent fire-fighting water from entering surface water or ground water.
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6. ACCIDENTAL RELEASE MEASURES

Person -related precautionary measures: Avoid substance contact. Do not inhale vapours/aerosols. Ensure supply of fresh air in enclosed rooms.

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

Procedures for cleaning/absorption: Take up with liquid-absorbent material (e.g. Chemizorb). Forward for disposal. Clean up effected area.

7. HANDLING AND STORAGE

Handling : Notes for safe handling: Work under hood.

Do not inhale substance. Avoid generation of vapours/aerosols.

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

Dry. At + 15°C to + 25°C. Accessible only for authorized persons.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment

Respiratory protection : Required when dusts are generated.

Eye protection : required



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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.

Industrial hygiene : Immediately change contaminated clothing. Apply skin –protective barrier cream .Wash hands and face after working with substance. Under no circumstances eat or drink at workplace. Work under hood. Do not inhale substance.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Liquid
Colour : Colourless to slightly yellowish
Odour : Characteristic
PH value (20° C) : >3.0
Melting temperature : -5° C
Boiling temperature : >100° C
Ignition temperature : 275° C
Flash point : 71° C (calculated on the pure substance)
Explosion limits lower : Not available
Upper : Not available
Vapour pressure (20°C) : 22 hPa
Relative vapour density : 1.0 (calculated on the pure substance)
Density (20°C) : 1.06 g/cm³
Solubility in water(20°C) : Freely soluble
Ethanol (20°C) : Soluble
Acetone (20°C) : Soluble
Log Pow : -0.22 (experimental)



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10. STABILITY AND REACTIVITY

Conditions to be avoided : Heating.
Substance to be avoided : Strong bases.
Hazardous decomposition products : No information available

Further information : Heat-sensitive, tends to polymerise; unsuitable working materials: aluminium, various metals.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

LC₅₀ (inhalation, rat): 0.48 mg/14 h (calculated on the pure substance).
LD₅₀ (dermal, rabbit): 2560 mg/kg (calculated on the pure substance).
LD₅₀ (oral, rat): 134 mg/kg (calculated on the pure substance).

Specific symptoms in animal studies:

Eye irritation test (rabbit): burns (calculated on the pure substance).

Subacute to chronic toxicity: Applicable to the toxicologically
determinant component:

Sensitisation : Sensitisation test (guinea pig): positive.

Mutagenicity (mammal cell test): micronucleus negative.(in vivo)

Mutagenicity(mammal cell test): Positive. (in vitro)

Bacterial mutagenicity : Ames test : Positive.

Further toxicological information:

Applicable to the toxicologically determinant component:

After skin contact : Burns. Risk of skin sensitisation.

After eye contact: Lacrimal irritation due to vapours. Conjunctivitis,

Risk of corneal clouding, burns.

After inhalation : irritations of the mucous membranes, coughing, and
dyspnoea. Risk of airways sensitisation.



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After swallowing : Burns in mouth , throat, oesophagus and gastrointestinal tract. Risk of perforation in the oesophagus and stomach. Nausea, vomiting, diarrhoea, circulation failure. coma.

Further data: Further hazardous properties cannot be excluded. The product should be handled with the care usual when dealing with chemicals.

12. ECOLOGICAL INFORMATION

Abiotic degradation: Slow degradation.

Biologic degradation : Biodegradation: 74%/28 d (closed bottle test).

Readily biodegradable.

Behavior in environmental compartments: Distribution: Log P(o/w):

-0.02 (experimental). No bioaccumulation is to be expected (logP(o/w <1).

Ecotoxic effects: Biological effects:

Highly toxic for aquatic organisms. Bactericidal effect. From toxic mixtures in water, dilution measures not withstanding. When introduced

properly, no impairments in the function of adapted biological waste-treatment plants are to be expected.

Fish toxicity : P.promelas LC₅₀ : 10.8 mg/l /96 h;

Bacterial toxicity : Ps.putida EC₅₀: 13 mg/l/17 h.

Algal toxicity : Desmodesmus subspicatus IC₅₀: 0.61 mg/l/72 h (50% solution).

Further ecologic data: Degradability :

COD: 1385 mg/g. BOD₅: 235 mg/g.

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



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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](http://www.Retrologistik.de) you will find special information on the respective national conditions as well as contact partners.

14. TRANSPORT INFORMATION

Transport over land ADR/RID and GGVS/GGVE

GGVS/GGVE class : 6.1 Number and letter : 27 b
ADR/RID class : 6.1 Number and letter : 27 b
Name of material : GLUTARDIALDEHYDE

River transport AND/ADNR : not examined

Sea transport IMDG

IMDG class : 6.1 UN-No. : 2927 Packaging group: 11
EMS : 6.1-0 MFAG : ----

Correct technical name : GLUTARDIALDEHYDE

Air transport ICAO-TI and IATA-DGR

ICAO/IATA class : 6.1/8 UN/ID-No.: 2927 Packaging group : 11

Correct technical name : GLUTARDIALDEHYDE



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15. REGULATORY INFORMATION

Labelling according to EC Directives

Symbol : T Toxic
N Dangerous for the environment

R-phrases : 22-23-34-42/43-50 Harmful if swallowed. Toxic by inhalation. Causes burns. May cause sensitisation by inhalation and skin contact. Very toxic to aquatic organisms.

S-phrases : 22- 26-36/37/39-45 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). Avoid release to the environment. Refer to special instructions/ Safety data sheets.

EC-No. : -----

Water pollution class : ----

16. OTHER INFORMATION

Text of any R phrases referred to under heading 2: 23/25

Toxic by inhalation and if swallowed.

34 Causes burns.

42/43 May cause sensitisation by inhalation and skin contact.

50 Very toxic to aquatic organisms.



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Reason for alteration

Chapter 9 : change/addition in physical/chemical proprieties.

Chapter 11: toxicological information. Change in the chapter on toxicology.

Chapter 12 : ecological information.

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.
