



SAFETY DATA SHEET

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No. : T 74329
Product Name : THIOSEMICARBAZIDE

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

CAS-No : 79-19-6 EC No. : 201-184-7
Molar Mass : 91.14 EC Index No. : ----
Molecular Formula : $\text{CH}_5\text{N}_3\text{S}$

3. HAZARDS IDENTIFICATION

Very toxic if swallowed.

4. FIRST AID MEASURES

After inhalation : Fresh air. Immediately Summon doctor.
After skin contact : Wash off with plenty of water.
Remove contaminated clothing.
After eye contact : Rinse out with plenty of water for with the eyelid held wide open. Summon eye specialist if necessary.
After swallowing : Make victim drink plenty of water, induce vomiting.
Immediately summon doctor.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water, Powder, foam.
Special risks : Combustible. Formation of hazardous combustion gases or vapours possible in the event of fire.
The following may develop in event of fire : sulphur oxides, nitrogen oxides.

6. ACCIDENTAL RELEASE MEASURES : Person-related precautionary measures : Avoid substance contact.
Procedures for cleaning/absorption : Take up dry. Forward for disposal.
Clean up affected area. Avoid generation of dusts.
Environmental-protection measures : Do not allow to enter sewerage system.

7. HANDLING AND STORAGE : Handling : No further requirements.
Storage : Tightly closed in a well-ventilated place. At +15° C to +25° C.
Accessible only for authorised persons.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory protection : Required when dusts are generated.
Eye protection : Required
Hand protection : Required
Industrial hygiene : Change contaminated clothing. Application of skin- protective



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barrier cream recommended. Wash hands after working with substance. Under no circumstances eat or drink at workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	Solid
Colour	:	White to yellowish
Odour	:	Almost odourless
pH value at 50 gm/lt. H ₂ O (20° C)	:	5-7
Melting temperature	:	178 - 180° C
Boiling temperature	:	Not available
Ignition temperature	:	Not available
Flash point	:	Not available
Explosion limits Lower	:	Not available
Upper	:	Not available
Relative vapour density	:	Not available
Density	:	Not available
Bulk density	:	~500 - 600 kg/m ³
Solubility in water (20° C)	:	Soluble
ethanol (50° C)	:	Soluble
Thermal decomposition	:	~180° C

10. STABILITY & REACTIVITY

Conditions to be avoided : Strong heating(decomposition)
Substances to be avoided : Strong Acids, Strong alkalis
Hazardous decomposition products : No information available
Further information : Heat-sensitive.

11. TOXICOLOGICAL INFORMATION

Acute toxicity : LD₅₀ (oral, rat) : 9.16 mg/kg(anhydrous substance)
Further toxicological information :
After inhalation of dusts : Irritation symptoms in the respiratory tract.
After skin contact : Irritations.
After eye contact : Irritations.
After swallowing : Highly toxic.

Systemic effects: CNS disorders, cardiovascular disorders

Further data : This substance should be handled with particular care.

12. ECOLOGICAL INFORMATION

Ecotoxic effects : Quantitative data on the ecological effect of this product are not available. A harmful effect on aquatic organisms cannot be excluded in the event of improper handling or disposal.
Further ecologic data : Do not allow to enter waters, waste water, or soil!

13. DISPOSAL METHOD

Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-



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contaminated packaging may be treated like house-hold waste or recycled.

There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. Approved waste disposal companies which will advise you on how to dispose of special waste.

14. TRANSPORT INFORMATION

GGVS/GGVE class : 6.1 Number and letter : 25b

Transport over land : ADR/RID class : 6.1 Number and letter : 25b
ADR/RID & GGVS/GGVE : Name of material : THIOSEMICARBAZIDE
Sea Transport IMDG : IMDG class : 6.1 UN No. : 2811 Packing group : II
Ems : 6.1-04 MFAG : 4.2
Correct Technical Name : THIOSEMICARBAZIDE

Air Transport : ICAO/IATA class : 6.1 UN No. : 2811 Packaging group : II
ICAO-TI & IATA-DGR : Correct Technical Name : THIOSEMICARBAZIDE

15. REGULATORY INFORMATION

Labelling according to EC Directives

Symbol : T+ Very toxic
R-phrases : 28 Very toxic if swallowed.
S-phrases : 45 In case of accident or if you feel unwell,
seek medical advice immediately (show the
label where possible).

Water pollution class : 3 (highly polluting substance)

16. OTHER INFORMATION

Reason for alteration

General update

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.
