



# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No. : T 10329  
Product Name : THIOUREA

### 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 : Thiocarbamide

CAS-No : 62-56-6 EC Index No. : 007-096-00-9  
Molar mass : 76.11 EC –No. : 200-543-5  
Molecular Formula :  $\text{CH}_4\text{N}_2\text{S}$

## 3. HAZARDS IDENTIFICATION

Harmful if swallowed . Possible risks of irreversible effects. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 4. FIRST AID MEASURES

After skin contact : Wash off with plenty of water .  
After eye contact : Rinse out with plenty of water with the eyelid held wide open.  
After inhalation : fresh air. Consult doctor if feeling unwell.  
After swallowing : Make victim drink plenty of water, induce vomiting, Summon doctor. Gastric lavage.

## 4. FIRE – FIGHTING MEASURES

Suitable extinguishing media : Water, foam, powder.  
Special risks : Combustible . Formation of hazardous combustion gases or vapours possible in event of fire.  
The following may develop in event of fire : sulfur oxides,  
Other information : Contain escaping vapours with water.

## 5. ACCIDENTAL RELEASE MEASURES:

Person-related precautionary measures : Avoid generation of dusts; do not inhale dusts.  
Environmental –protection measures : Do not allow to enter sewerage system.  
Procedures for cleaning /absorption : Take up dry. Forward for disposal. Clean up affected area .

## 6. HANDLING AND STORAGE

Handling : No further requirements.



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Storage : Tightly closed . Dry.  
Storage temperature : No restrictions.

## 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

### *Personal protective equipment*

Respiratory protection : Require when dusts are generated  
Eye protection : Required  
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 : Change contaminated clothing. Application skin – protective barrier cream recommended. Wash hands after working with substance.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	Solid
Colour	:	Colourless to white
Odour	:	Odourless
pH value at 50g/l H <sub>2</sub> O(20°C)	:	5-7
Melting temperature	:	174-177 ° C
Boiling temperature(760 mmHg)	:	Not available
Ignition temperature	:	440 ° C
Flash point	:	Not available
Explosion limits lower	:	Not available
Upper	:	Not available
Vapour pressure (20°C)	:	<0.0001 hPa
Relative vapour density	:	Not available
Density (20°C)	:	1.41 g/cm <sup>3</sup>
Bulk density	:	500-700 kg/m <sup>3</sup>
Solubility in water (20°C)	:	137 g/l
Ethanol (20°C)	:	37 g/l
LogP(oct)	:	-0.95

10. **STABILITY AND REACTIVITY** : Conditions to be avoided : Heating.  
Substance to be avoided : Oxidizing agent, acryl aldehyde,  
nitric acid, hydrogen peroxide.  
Hazardous decomposition products :  
In the event of fire : sulfur oxides, nitrogen oxides.

## 11. TOXICOLOGICAL INFORMATION

Acute toxicity: LD<sub>50</sub> (oral, rat): 1750 mg/kg.  
Subacute to chronic toxicity :  
Ames –Test : No indication of mutagenic activity.  
Micronucleus-Test : No indication of mutagenic activity.  
Chronic intoxication : Changes in the blood picture.  
The carcinogenic potential requires further clarification.



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## ***Further toxicological information:***

After eye contact : Mucosal irritations.  
Ingestion may result in : nausea, vomiting, diarrhoea.  
After absorption of large quantities : pulmonary oedema.  
Sensitisation with allergic manifestations in predisposed persons.  
Systemic effects : Damage of : thyroid.  
Further data : The product should be handled with the care usual  
when dealing with chemicals.

## **12. ECOLOGICAL INFORMATION**

Behaviour in environmental compartments :  
Distribution : log P(oct) : -0.95; Evaluation number (FRG)(bacteria):  
2.5-2.9 ; Evaluation number (FRG) (fish): 2.0;  
Evaluation number )FRG) (mammal):3;

Ecotoxic effects : Biological effects: Toxic for aquatic organisms.  
May cause long-term adverse effects in the aquatic environment.  
Fish toxicity : Br.rerio LC<sub>50</sub> : 10000 mg/l/96 h; P.promelas  
LC<sub>50</sub> : > 100 mg/l .  
Daphnia toxicity : Daphnia magna EC 50 : 1.8 mg/l;  
Bacterial toxicity : Ps.putida EC10 : 1265 mg/l:

Further ecologic data : Degradability :  
BOD 5: 0.013 g/g; COD : 0.84 g/g; ThOD : 2.42 g/g ;  
Do not allow to enter waters, waste water, or soil.

## **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**

GGVS/GGVE class : 9 Number and letter : 12c  
Transport over land A ADR/RID class : 9 Number and letter : 121 c  
DR/RID & GGVS/GGVE Name of material : 3077 THIOUREA

River transport AND/ADNR : Not examined  
Sea transport IMDG : IMDG class : UN-NO. : Packaging group :  
Ems : MFAG :  
Correct technical name : 3077 THIOUREA



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Air transport ICAO-TI and IATA-DGR

ICAO/IATA : 9 UN/ID-No.: 3077 Packaging group : 111  
Correct technical name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE,  
SOLID, N.O.S. (THIOUREA)

### 15. REGULATORY INFORMATION :

Labelling according to EC Directives

Symbol : Xn Harmful  
N Dangerous for the environment.

R- Phrases : 22-40-51/53 Harmful if swallowed. Possible risks of irreversible effects. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases : 22-24-36/37-61 Do not breathe dust. Avoid contact with skin .  
Wear suitable protective clothing and gloves.  
Avoid release to the environment . Refer to special instructions . Safety data sheets.

EC-No. : 200-543-5 EC label

Water pollution class : 2 ( polluting substance)

### 16. OTHER INFORMATION

Reason for alteration

General update  
Addition in the chapter toxicology

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.

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