

Website:- chemicalbull.com MATERIAL SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Trimethylsilyl Isothiocyanate

CAS-No. : 2290-65-5

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Chemical Bull Pvt Ltd

123/124, Panchratna, G.I.D.C Char Rasta, Vapi-396195 Dist, Valsad, Gujarat, INDIA **Website:**- chemicalbull.com

Email: info@chemicalbull.com

1.4 Emergency telephone

Emergency Phone : +91 9696960250

## **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

## Classification according to Regulation

Flammable liquids Acute toxicity, Oral Acute toxicity, Inhalation Acute toxicity,

Dermal Skin irritation

Eye irritation Respiratory sensitization

Specific target organ toxicity - single exposure, Respiratory system, For the full text of

the H-Statements mentioned in this Section, see Section 16.

## 2.2 Label elements

Labelling according Regulation

Pictogram

Signal word Danger

Hazard statement(s)

H226 Flammable liquid and vapor.

H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties

if inhaled.

H335 May cause respiratory irritation.

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and

other ignition sources. No smoking.

P280 Wear protective gloves/ protective clothing/ eye protection/ face

protection/ hearing protection.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water.

P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable

for breathing. Call a POISON CENTER/ doctor.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue

rinsing.

Supplemental Hazard

Statements

none

Reduced Labeling (<= 125 ml)

Pictogram

Signal word Danger

Hazard statement(s)

H334 May cause allergy or asthma symptoms or breathing difficulties

if inhaled.

H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled.

Precautionary statement(s)

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

for breathing. Call a POISON CENTER/ doctor.

Supplemental Hazard

Statements

none

## 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Synonyms : Isothiocyanatotrimethylsilane

Formula : C4H9NSSi Molecular weight : 131.27 g/mol CAS-No. : 2290-65-5

Component		Classification	Concentration
Trimethylsilyl isothiocyanate			
CAS-No.	2290-65-5	Flam. Liq. 3; Acute Tox. 3	; <= 100 %
		Skin Irrit. 2; Eye Irrit. 2; Resp. Sens. 1; STOT SE 3	
		H226, H301, H331, H311,	
		H315, H319, H334, H335	

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### **SECTION 4: First aid measures**

## 4.1 Description of first-aid measures

#### **General advice**

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

#### If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

#### If swallowed

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

## 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

# 4.3 Indication of any immediate medical attention and special treatment needed No data available

#### **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

## Suitable extinguishing media

Foam Carbon dioxide (CO2) Dry powder

## Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

## 5.2 Special hazards arising from the substance or mixture

Carbon oxides

Nitrogen oxides (NOx)

Sulfur oxides

silicon oxides

Combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air at elevated temperatures.

Development of hazardous combustion gases or vapours possible in the event of fire.

#### 5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

#### 5.4 Further information

Remove container from danger zone and cool with water. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

## 6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

## 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material. Dispose of properly. Clean up affected area.

## 6.4 Reference to other sections

For disposal see section 13.

## **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

#### Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

## Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

#### Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons.

#### Storage stability

Recommended storage temperature 2 - 8 °C

Hydrolyzes readily.

## Storage class

Storage class Flammable liquids

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

Ingredients with workplace control parameters

# 8.2 Exposure controls

## Personal protective equipment

## **Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as Safety glasses

## Skin protection

required

## **Body Protection**

Flame retardant antistatic protective clothing.

#### Respiratory protection

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type ABEK

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

## Control of environmental exposure

Do not let product enter drains. Risk of explosion.

## SECTION 9: Physical and chemical properties

# 9.1 Information on basic physical and chemical properties

a) Appearance Form: clear, liquid Color: light yellow

b) Odor No data available

c) Odor Threshold No data availabled) pH No data available

e) Melting Melting point/range: -32,8 °C - lit.143 point/freezing point

f) Initial boiling point °C - lit. and boiling range

g) Flash point 29 °C - closed cup
 h) Evaporation rate No data available
 i) Flammability (solid, gas)

j) Upper/lower No data available flammability or explosive limits

k) Vapor pressure No data availablel) Vapor density 4,53 - (Air = 1.0)

m) Density 0,931 g/cm3 at 25 °C - lit.

Relative density

No data available

n) Water solubility

No data available

) Partition coefficient:n
No data available

octanol/water

p) Autoignition No data available

temperature

No data available

ן) Decomposition temperature

r) Viscosity Viscosity, kinematic: No data available Viscosity, dynamic: No data available

## 9.2 Other safety information

Relative vapor 4,53 - (Air = 1.0) density

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Vapor/air-mixtures are explosive at intense warming.

## 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

## 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

Heat.

Heating.

## 10.5 Incompatible materials

Strong oxidizing agents Alcohols, Strong bases, Amines, acids, Strong oxidizing agents

#### 10.6 Hazardous decomposition products

In the event of fire: see section 5

# **SECTION 11: Toxicological information**

# 11.1 Information on toxicological effects

## **Acute toxicity**

Oral: No data available LC50 Inhalation - 4 h - 3 mg/l

(Acute toxicity estimate) LD50 Dermal - 300 mg/kg

## Skin corrosion/irritation

No data available

## Serious eye damage/eye irritation

No data available

## Respiratory or skin sensitization

No data available

## Germ cell mutagenicity

No data available

## Carcinogenicity

No data available

#### Reproductive toxicity

No data available

## Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

## Specific target organ toxicity - repeated exposure

No data available

## **Aspiration hazard**

No data available

#### 11.2 Additional Information

Repeated exposure may cause asthma., prolonged or repeated exposure can cause:, Nausea, Dizziness, Headache, Lung irritation, chest pain, pulmonary edema, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## **SECTION 12: Ecological information**

#### 12.1 Toxicity

No data available

## 12.2 Persistence and degradability

No data available

## 12.3 Bioaccumulative potential

No data available

## 12.4 Mobility in soil

No data available

## 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

No data available

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Product**

See for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

## **SECTION 14: Transport information**

#### 14.1 UN number

ADR/RID: 1992 IMDG: 1992 IATA: 1992

#### 14.2 UN proper shipping name

ADR/RID: FLAMMABLE LIQUID, TOXIC, N.O.S. (Trimethylsilyl isothiocyanate) IMDG: FLAMMABLE LIQUID, TOXIC, N.O.S. (Trimethylsilyl isothiocyanate) IATA: Flammable liquid, toxic, n.o.s. (Trimethylsilyl isothiocyanate)

## 14.3 Transport hazard class(es)

ADR/RID: 3 (6.1) IMDG: 3 (6.1) IATA: 3 (6.1)

#### 14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

## 14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

#### 14.6 Special precautions for user

No data available

#### **SECTION 15: Regulatory information**

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This material safety data sheet complies with the requirements of Regulation

#### National legislation

Seveso of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

: ACUTE TOXIC

: FLAMMABLE LIQUIDS

#### Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir national regulations where applicable.

Take note on the protection of young people at work.

#### 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

#### SECTION 16: Other information

## Full text of H-Statements referred to under sections 2 and 3.

H226 H301 H301 + H311 + H331	Flammable liquid and vapor. Toxic if swallowed. Toxic if swallowed, in contact with skin or if inhaled.
H311 H315 H319 H331 H334 H335	Toxic in contact with skin. Causes skin irritation. Causes serious eye irritation. Toxic if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.

## **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Chemical Bull Pvt Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

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