

# Safety Data Sheet

## LUPRANATE® T80 TYPE 1 ISOCYANATE

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Version: 10.0

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(30076828/SDS\_GEN\_US/EN)

### 1. Identification

#### Product identifier used on the label

## LUPRANATE® T80 TYPE 1 ISOCYANATE

#### Recommended use of the chemical and restriction on use

Recommended use\*: Chemical, Raw material

Recommended use\*: polyurethane component; industrial chemicals

Unsuitable for use: Uses other than recommended

Suitable for use in industrial sector: Polymers industry; chemical industry

\* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

#### Details of the supplier of the safety data sheet

##### Company:

BASF CORPORATION  
100 Park Avenue  
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

#### Emergency telephone number

##### 24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300

BASF HOTLINE: 1-800-832-HELP (4357)

#### Other means of identification

Chemical family: aromatic isocyanates

Synonyms: TOLUENE DIISOCYANATE

TDI:TOLUENE DIISOCYANATE

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### 2. Hazards Identification

#### According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

#### Classification of the product

Acute Tox.	1 (Inhalation - vapour)	Acute toxicity
Skin Corr./Irrit.	2	Skin corrosion/irritation

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Eye Dam./Irrit.	2A	Serious eye damage/eye irritation
Resp. Sens.	1	Respiratory sensitization
Skin Sens.	1	Skin sensitization
Carc.	2	Carcinogenicity
STOT SE	3 (irritating to respiratory system)	Specific target organ toxicity — single exposure
Aquatic Acute	3	Hazardous to the aquatic environment - acute
Aquatic Chronic	3	Hazardous to the aquatic environment - chronic

### Label elements

Pictogram:



Signal Word:

Danger

Hazard Statement:

H319	Causes serious eye irritation.
H315	Causes skin irritation.
H330	Fatal if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H402	Harmful to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves, protective clothing and eye protection or face protection.
P260	Do not breathe mist or vapour or spray.
P201	Obtain special instructions before use.
P284	In case of inadequate ventilation wear respiratory protection.
P273	Avoid release to the environment.
P202	Do not handle until all safety precautions have been read and understood.
P272	Contaminated work clothing should not be allowed out of the workplace.
P264	Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

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P310	Immediately call a POISON CENTER or physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304 + P341 + P311	IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical attention.
P333 + P313	If skin irritation or rash occurs: Get medical attention.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P337 + P313	If eye irritation persists: Get medical attention.
P308 + P313	IF exposed or concerned: Get medical attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.

#### Precautionary Statements (Storage):

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

#### Precautionary Statements (Disposal):

P501	Dispose of contents and container to hazardous or special waste collection point.
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### Hazards not otherwise classified

#### Labeling of special preparations (GHS):

CONTAINS ISOCYANATES. INHALATION OF ISOCYANATE MISTS OR VAPORS MAY CAUSE RESPIRATORY IRRITATION, BREATHELESSNESS, CHEST DISCOMFORT AND REDUCED PULMONARY FUNCTION. OVEREXPOSURE WELL ABOVE THE PEL MAY RESULT IN BRONCHITIS, BRONCHIAL SPASMS AND PULMONARY EDEMA. LONG-TERM EXPOSURE TO ISOCYANATES HAS BEEN REPORTED TO CAUSE LUNG DAMAGE, INCLUDING REDUCED LUNG FUNCTION WHICH MAY BE PERMANENT. ACUTE OR CHRONIC OVEREXPOSURE TO ISOCYANATES MAY CAUSE SENSITIZATION IN SOME INDIVIDUALS, RESULTING IN ALLERGIC RESPIRATORY REACTIONS INCLUDING WHEEZING, SHORTNESS OF BREATH AND DIFFICULTY BREATHING. ANIMAL TESTS INDICATE THAT SKIN CONTACT MAY PLAY A ROLE IN CAUSING RESPIRATORY SENSITIZATION.

## 3. Composition / Information on Ingredients

### According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

toluene-2,4-diisocyanate

CAS Number: 584-84-9

Content (W/W): 80.0 %

Synonym: 2,4-Diisocyanatotoluene; 2,4-Toluene diisocyanato, 2,4-TDI

toluene-2,6-diisocyanate

CAS Number: 91-08-7

Content (W/W): 20.0 %

Synonym: 1,3-Diisocyanato-2-methylbenzene

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### 4. First-Aid Measures

#### Description of first aid measures

##### General advice:

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

##### If inhaled:

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

##### If on skin:

Immediately wash thoroughly with soap and water, seek medical attention.

##### If in eyes:

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Remove contact lenses, if present. Immediate medical attention required.

##### If swallowed:

Rinse mouth and then drink 200-300 ml of water. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.

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

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., Eye irritation, skin irritation, allergic symptoms, eczema, asthma, lung oedema

*Information on: toluene-2,6-diisocyanate*

*Symptoms: Overexposure may cause:, Eye irritation, skin irritation, erythema, nausea, headache, vomiting, dizziness, diarrhea, abdominal cramps*

*Information on: toluene-2,4-diisocyanate*

*Symptoms: Overexposure may cause:, Eye irritation, skin irritation, erythema, nausea, headache, vomiting, dizziness, diarrhea, abdominal cramps*

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Hazards: Symptoms can appear later. In sensitized individuals, sensitization reactions may be elicited by structurally similar substances. Respiratory sensitization may result in allergic (asthma-like) signs in the lower respiratory tract including wheezing, shortness of breath and difficulty breathing, the onset of which may be delayed. Repeated inhalation of high concentrations may cause lung damage, including reduced lung function, which may be permanent. Substances eliciting lower respiratory tract irritation may worsen the asthma-like reactions that may be produced by product exposures.

#### Indication of any immediate medical attention and special treatment needed

##### Note to physician

Antidote:

Specific antidotes or neutralizers to isocyanates do not exist.

Treatment:

Treatment should be supportive and based on the judgement of the physician in response to the reaction of the patient.

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### 5. Fire-Fighting Measures

#### Extinguishing media

Suitable extinguishing media:  
water spray, foam, carbon dioxide

Unsuitable extinguishing media for safety reasons:  
water jet

Additional information:  
Use extinguishing measures to suit surroundings.

#### Special hazards arising from the substance or mixture

Hazards during fire-fighting:  
nitrous gases, fumes/smoke, isocyanate, vapour

#### Advice for fire-fighters

Protective equipment for fire-fighting:  
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

#### Further information:

Keep containers cool by spraying with water if exposed to fire. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

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### 6. Accidental release measures

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

Clear area. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

#### Environmental precautions

Do not discharge into drains/surface waters/groundwater.

#### Methods and material for containment and cleaning up

For small amounts: Absorb isocyanate with suitable absorbent material (see § 40 CFR, sections 260, 264 and 265 for further information). Shovel into open container. Spill area can be decontaminated with the following recommended decontamination solution: Mixture of 90 % water, 5-8 % household ammonia, 2-5 % detergent. Allow solution to stand for at least 10 minutes. Pick up with suitable absorbent material. Place into appropriately labeled waste containers. Do not make container pressure tight. Move container to a well-ventilated area (outside). Allow to stand for at least 48 hours to allow escape of evolved carbon dioxide. Dispose of absorbed material in accordance with regulations.

For large amounts: For spills, stop leaks and provide diking to contain the material. Prevent entry into sewage systems, ground and surface waters. If temporary control of isocyanate vapor is required, a blanket of protein foam or other suitable foam (available from most fire departments) may be placed over the spill. Transfer as much liquid as possible via pump or vacuum device into closed but not sealed containers for disposal.

For residues: The following measures should be taken for final cleanup: Spill area can be decontaminated with the following recommended decontamination solution: Mixture of 90 % water, 5-8 % household ammonia, 2-5 % detergent. Wash down spill area with decontamination solution. Allow solution to stand for at least 10 minutes. Pick up with suitable absorbent material. Place into appropriately labeled waste containers. Do not make container pressure tight. Move container to a well-ventilated area (outside). Allow to stand for at least 48 hours to allow escape of evolved carbon dioxide. Dispose of absorbed material in accordance with regulations.

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### 7. Handling and Storage

#### Precautions for safe handling

Mix thoroughly before use. If bulging of drum occurs, transfer to well ventilated area, puncture to relieve pressure, open vent and let stand for 48 hours before resealing.

Protection against fire and explosion:

No special precautions necessary.

#### Conditions for safe storage, including any incompatibilities

Keep away from water. Segregate from foods and animal feeds. Segregate from acids and bases.

Suitable materials for containers: Carbon steel (Iron), High density polyethylene (HDPE), Low density polyethylene (LDPE), Stainless steel 1.4301 (V2), Stove-lacquer Valspar HXC0001, tinned carbon steel (Tinplate)

Unsuitable materials for containers: Paper/Fibreboard

Further information on storage conditions: Formation of CO<sub>2</sub> and build up of pressure possible. Keep container tightly closed and in a well-ventilated place. Outage of containers should be filled with dry inert gas at atmospheric pressure to avoid reaction with moisture.

Storage stability:

Storage temperature: 60 - 85 °F

Protect against moisture.

Store at indicated temperature to prevent freezing and isomer separation or discolourization and dimerization.

Thaw solidified substance/product at temperature < 95 °F to prevent discolourization.

### 8. Exposure Controls/Personal Protection

#### Components with occupational exposure limits

toluene-2,6-diisocyanate	ACGIH, US:	STEL value 0.005 ppm Inhalable fraction and vapor ;
	ACGIH, US:	Skin Designation Inhalable fraction and vapor ; The substance can be absorbed through the skin.
	ACGIH, US:	TWA value 0.001 ppm Inhalable fraction and vapor ;
	ACGIH, US:	Skin Designation Inhalable fraction and vapor ; Danger of cutaneous absorption
toluene-2,4-diisocyanate	ACGIH, US:	TWA value 0.001 ppm Inhalable fraction and vapor ;
	ACGIH, US:	Skin Designation Inhalable fraction and vapor ; The substance can be absorbed through the skin.
	ACGIH, US:	STEL value 0.005 ppm Inhalable fraction and vapor ;
	OSHA Z1:	CLV 0.02 ppm 0.14 mg/m <sup>3</sup> ;
	ACGIH, US:	Skin Designation Inhalable fraction and vapor ; Danger of cutaneous absorption

#### Advice on system design:

Provide local exhaust ventilation to control vapours/mists.

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### Personal protective equipment

#### **Respiratory protection:**

When workers are facing concentrations above the occupational exposure limits they must use appropriate certified respirators. When atmospheric levels may exceed the occupational exposure limit (PEL or TLV) NIOSH-certified air-purifying respirators equipped with an organic vapor sorbent and particulate filter can be used as long as appropriate precautions and change out schedules are in place. Wear a NIOSH-certified (or equivalent) TC19C positive pressure air supplied respirator. For emergency or non-routine, high exposure situations, including confined space entry, use a NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

#### **Hand protection:**

Chemical resistant protective gloves should be worn to prevent all skin contact., Suitable materials may include, chloroprene rubber (Neoprene), nitrile rubber (Buna N), chlorinated polyethylene, polyvinylchloride (Pylox), butyl rubber, fluoroelastomer (Viton), depending upon conditions of use.

#### **Eye protection:**

Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

#### **Body protection:**

Cover as much of the exposed skin as possible to prevent all skin contact., Suitable materials may include, saran-coated material, depending upon conditions of use.

#### **General safety and hygiene measures:**

Wear protective clothing as necessary to prevent contact. Eye wash fountains and safety showers must be easily accessible. Observe the appropriate PEL value. Wash soiled clothing immediately. Remove contaminated clothing immediately and clean before re-use or dispose it if necessary.

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## 9. Physical and Chemical Properties

Form:	liquid
Odour:	strong, pungent odour
Odour threshold:	Not determined due to respiratory tract sensitizing properties.
Colour:	clear
pH value:	not applicable
Melting point:	approx. 53.6 °F ( 760 mmHg) 9.5 - 10 °C
Freezing point:	No data available.
Boiling point:	approx. 248 °C ( 760 mmHg) approx. 252 - 254 °C ( 1,013 hPa)
Sublimation point:	No applicable information available.
Flash point:	270 °F
Flammability:	not flammable (derived from flash point)
Lower explosion limit:	For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point.
Upper explosion limit:	For liquids not relevant for classification and labelling.
Autoignition:	> 600 °C

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Vapour pressure:	0.025 mmHg ( 25 °C)	
Density:	1.22 g/cm3 ( 25 °C)	(DIN 51757)
Vapour density:	not applicable	
Partitioning coefficient n-octanol/water (log Pow):	( 22 °C) Study scientifically not justified.	(OECD Guideline 117)
Self-ignition temperature:	not self-igniting	
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.	
Viscosity, dynamic:	No applicable information available.	
Viscosity, kinematic:	No applicable information available.	
Solubility in water:	124 mg/l ( 25 °C) Study scientifically not justified.	
Miscibility with water:	Reacts with water.	
Solubility (quantitative):	No applicable information available.	
Solubility (qualitative):	No applicable information available.	
Molar mass:	174.16 g/mol	
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.	
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.	

## 10. Stability and Reactivity

### Reactivity

Corrosion to metals:  
No corrosive effect on metal.

Oxidizing properties:  
not fire-propagating

Formation of flammable gases:	Remarks:	Forms no flammable gases in the presence of water.
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### Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### Possibility of hazardous reactions

Reacts with water, with formation of carbon dioxide. Risk of bursting. Reacts with alcohols. Reacts with acids. Reacts with alkalies. Reacts with amines. Risk of exothermic reaction. Risk of polymerization. Contact with certain rubbers and plastics can cause brittleness of the substance/product with subsequent loss in strength.

### Conditions to avoid

> 40 degrees Celsius

### Incompatible materials

copper, zinc, Tin, acids, alcohols, amines, water, Alkalines, copper alloys, aluminum compounds, strong oxidizing agents

### Hazardous decomposition products



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Decomposition products:

toluene-2,4-diisocyanate, carbon monoxide, hydrogen cyanide, toluene-2,6-diisocyanate, nitrogen oxides, aromatic isocyanates, gases/vapours

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

## 11. Toxicological information

### Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

### Acute Toxicity/Effects

#### Acute toxicity

Assessment of acute toxicity: Of very high toxicity after short-term inhalation.

#### Oral

Type of value: LD50

Species: rat

Value: 6,170 mg/kg

Literature data.

#### Inhalation

Type of value: LC50

Species: rat

Value: 0.1 mg/l

Exposure time: 4 h

Literature data.

#### Dermal

Type of value: LD50

Species: rabbit

Value: > 16,000 mg/kg

Literature data.

#### Assessment other acute effects

Assessment of STOT single:

Causes temporary irritation of the respiratory tract.

#### Irritation / corrosion

Assessment of irritating effects: Irritating to eyes and skin.

*Information on: toluene-2,4-diisocyanate*

*Assessment of irritating effects: Skin contact causes irritation. Eye contact causes irritation. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.*

*Information on: toluene-2,6-diisocyanate*

*Assessment of irritating effects: Skin contact causes irritation. Eye contact causes irritation.*

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### Skin

Species: rabbit

Result: Irritant.

Literature data.

### Eye

Species: rabbit

Result: Irritant.

Literature data.

### Sensitization

Assessment of sensitization: Sensitization after skin contact possible. The substance may cause sensitization of the respiratory tract. Studies in animals suggest that dermal exposure may lead to pulmonary sensitization. However, the relevance of this result for humans is unclear.

*Information on: toluene-2,4-diisocyanate*

*Assessment of sensitization:*

*The substance may cause sensitization of the respiratory tract. Sensitization after skin contact possible. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.*

*Information on: toluene-2,6-diisocyanate*

*Assessment of sensitization:*

*The substance may cause sensitization of the respiratory tract. Sensitization after skin contact possible.*

-----  
Guinea pig maximization test

Species: guinea pig

Result: sensitizing

Literature data.

### Aspiration Hazard

No aspiration hazard expected.

## **Chronic Toxicity/Effects**

### Repeated dose toxicity

Assessment of repeated dose toxicity: The substance may cause damage to the lung even after repeated inhalation of low doses, as shown in animal studies. The substance may cause damage to the upper respiratory tract after repeated inhalation, as shown in animal studies.

*Information on: toluene-2,4-diisocyanate*

*Assessment of repeated dose toxicity: Based on available Data, the classification criteria are not met.*

*Information on: toluene-2,6-diisocyanate*

*Assessment of repeated dose toxicity: Not classified, due to lack of data.*

### Genetic toxicity

Assessment of mutagenicity: The substance was mutagenic in various test systems with bacterias and cell cultures; however, these results could not be confirmed in tests with mammals. Literature data.

### Carcinogenicity

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Assessment of carcinogenicity: IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). NTP listed carcinogen

*Information on: toluene-2,4-diisocyanate*

*Assessment of carcinogenicity: IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). NTP listed carcinogen*

*Information on: toluene-2,6-diisocyanate*

*Assessment of carcinogenicity: Indication of possible carcinogenic effect in animal tests.*

### Reproductive toxicity

Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect. Literature data.

### Teratogenicity

Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies. Literature data.

### Medical conditions aggravated by overexposure

Medical supervision of all employees who handle or come into contact with isocyanates is recommended. The isocyanate component is a respiratory sensitizer. It may cause allergic reaction leading to asthma-like spasms of the bronchial tubes and difficulty in breathing. Preemployment and periodic medical examinations with respiratory function tests (FEV, FVC as a minimum) are suggested. Persons with history of respiratory disease or hypersensitivity should not be exposed to this product. Persons with asthmatic conditions, chronic bronchitis, other chronic respiratory diseases, recurrent eczema or pulmonary sensitization should be excluded from working with isocyanates. Once a person is diagnosed as having pulmonary sensitization (allergic asthma) to isocyanates, further exposure is not recommended.

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## 12. Ecological Information

### **Toxicity**

#### Aquatic toxicity

Assessment of aquatic toxicity:

Acutely harmful for aquatic organisms. Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations. The product may hydrolyse. The test result maybe partially due to degradation products.

#### Chronic toxicity to aquatic invertebrates

EC50 (24 h) approx. 750 mg/l, Daphnia magna

Practically nontoxic.

EC50 (24 h) > 500 mg/l, Daphnia magna

Practically nontoxic.

#### Aquatic toxicity

*Information on: toluene-2,4-diisocyanate*

*Assessment of aquatic toxicity:*

*Acutely harmful for aquatic organisms. The chronic aquatic risk classification is based on acute aquatic toxicity study data and the environmental fate properties of the product. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.*

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*The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.*

*Information on: toluene-2,6-diisocyanate*

*Assessment of aquatic toxicity:*

*Acutely toxic for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. The chronic aquatic risk classification is based on acute aquatic toxicity study data and the environmental fate properties of the product.*

Other terrestrial non-mammals

LD50 100 mg/kg 100, Agelaius phoeniceus (OECD Guideline 205)

LD50 > 100 mg/kg > 100, Sturnus vulgaris (OECD Guideline 205)

### **Persistence and degradability**

Assessment biodegradation and elimination (H2O)

Poorly biodegradable. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. The product is unstable in water. The elimination data also refer to products of hydrolysis.

Elimination information

0 - 10 % BOD of the ThOD (28 d) (OECD Guideline 302 C) (aerobic, activated sludge, domestic)

Assessment of stability in water

In contact with water the substance will hydrolyse rapidly.

Information on Stability in Water (Hydrolysis)

50 - 90 % (2 h)

In contact with water the substance will hydrolyse rapidly.

### **Bioaccumulative potential**

Bioaccumulation potential

Bioconcentration factor: < 50 (42 d), Cyprinus carpio (OECD Guideline 305 C)

Does not significantly accumulate in organisms. The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

### **Mobility in soil**

Assessment transport between environmental compartments

Adsorption to solid soil phase is not expected.

### **Additional information**

Adsorbable organically-bound halogen (AOX):

This product contains no organically-bound halogen.

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## **13. Disposal considerations**

**Waste disposal of substance:**

TDI is listed as a hazardous waste under Section 261.33 (f) of EPA's RCRA regulations and requires special handling for disposal. Incinerate waste containing TDI in a RCRA-licensed facility.

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### Container disposal:

Steel drums must be emptied and can be sent to a licensed drum reconditioner for reuse, a scrap metal dealer or an approved landfill. Do not attempt to refill or clean containers since residue is difficult to remove. Under no circumstances should empty drums be burned or cut open with gas or electric torch as toxic decomposition products may be liberated. Do not reuse empty containers.

RCRA: U223

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## 14. Transport Information

### Land transport

USDOT

Hazard class: 6.1  
Packing group: II  
ID number: UN 2078  
Hazard label: 6.1  
Proper shipping name: TOLUENE DIISOCYANATE

### Sea transport

IMDG

Hazard class: 6.1  
Packing group: II  
ID number: UN 2078  
Hazard label: 6.1  
Marine pollutant: NO  
Proper shipping name: TOLUENE DIISOCYANATE

### Air transport

IATA/ICAO

Hazard class: 6.1  
Packing group: II  
ID number: UN 2078  
Hazard label: 6.1  
Proper shipping name: TOLUENE DIISOCYANATE

### Further information

DOT: This product is regulated if the amount in a single receptacle exceeds the Reportable Quantity (RQ). Please refer to Section 15 of this SDS for the RQ for this product.

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## 15. Regulatory Information

### Federal Regulations

#### Registration status:

Chemical TSCA, US released / listed

This product contains a substance subject to a pending SNUR.  
TSCA § 5(a) proposed Significant New Use Restriction (SNUR)  
listed on TSCA-Inventory with S-flag  
40 CFR 721.10789

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**EPCRA 311/312 (Hazard categories):** Refer to SDS section 2 for GHS hazard classes applicable for this product.

### EPCRA 313:

#### CAS Number

91-08-7

584-84-9

#### Chemical name

toluene-2,6-diisocyanate

toluene-2,4-diisocyanate

### CERCLA RQ

100 LBS

#### CAS Number

584-84-9; 91-08-7

#### Chemical name

toluene-2,4-diisocyanate; toluene-2,6-diisocyanate

**Reportable Quantity for release:**

125.0 lb

### State regulations

#### State RTK

PA

#### CAS Number

91-08-7

584-84-9

#### Chemical name

toluene-2,6-diisocyanate

toluene-2,4-diisocyanate

NJ

91-08-7

584-84-9

toluene-2,6-diisocyanate

toluene-2,4-diisocyanate

### **Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:**

**WARNING:** This product can expose you to chemicals including TOLUENE DIISOCYANATE, which is known to the State of California to cause cancer. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### **NFPA Hazard codes:**

Health: 3

Fire: 1

Reactivity: 1

Special:

### **HMIS III rating**

Health: 3 $\alpha$

Flammability: 1

Physical hazard: 1

## 16. Other Information

### **SDS Prepared by:**

BASF NA Product Regulations

SDS Prepared on: 2021/03/29

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# Safety Data Sheet

## LUPRANATE® T80 TYPE 1 ISOCYANATE

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