BASF
The Chemical Company

Safety data sheet
TX1 CARB STONE 300ML

1. Substance/preparation and company identification

Company
BASF CORPORATION
100 Campus Drive
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP

2. Composition/information on ingredients

CAS Number	Content (W/W)	Chemical name
1317-65-3	10.0 - 30.0 %	Limestone
112-62-9	5.0 - 10.0 %	methyl oleate
13463-67-7	3 0 - 7 0 %	Titanium dioxide
14807-96-6	1 0 - 5 0 %	talc
8052-41-3	1 0 - 5 0 %	Stoddard solvent
1305-78-8	1 0 - 5 0 %	calcium oxide
584-84-9	0 1 - 1 0 %	toluene-2,4-diisocyanate
14808-60-7	0 1 - 1 0 %	crystalline silica

3. Hazard identification

Emergency overview

DANGER: POISON. HARMFUL IF INHALED SENSITIZATION CAN OCCUR IN SOME INDIVIDUALS, LEADING TO ASTHMA-LIKE SPASMS OF THE BRONCHIAL TUBES AND DIFFICULTY BREATHING. INDIVIDUALS WITH A HISTORY OF RESPIRATORY ILLNESS, ASTHMATIC CONDITIONS, EYE DAMAGE OR TDI SENSITIZATION SHOULD NOT BE EXPOSED TO THIS PRODUCT. TDI IS INCLUDED IN THE NTP ANNUAL REPORT ON CARCINOGENS RESULTS FROM A TDI HEALTH STUDY INDICATE THAT OVEREXPOSURE TO A RESPIRATORY IRRITANT, RESULTING IN LOWER RESPIRATORY TRACT SYMPTOMS COULD INCREASE THE RISKS OF DEVELOPING ASTHMA-LIKE REACTIONS FROM SUBSEQUENT TDI EXPOSURE.
CONTAINS MATERIAL WHICH CAN CAUSE CANCER

Potential health effects

Primary routes of exposure
Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation Routes of entry for gases include inhalation and eye contact Skin contact may be a route of entry for liquified gases

Acute toxicity:
Of very high toxicity after short-term inhalation Virtually nontoxic after a single skin contact Virtually nontoxic after a single ingestion
Information on TDI
Of very high toxicity after short-term inhalation

Of low toxicity after single ingestion.
Virtually nontoxic after a single skin contact
Information on: Stoddard solvent
Aspiration may result in chemical pneumonitis which may be fatal

Irritation:
Eye contact causes irritation. Skin contact causes irritation.
Information on: TDI
Irritating to eyes, respiratory system and skin. Information on: methyl oleate
Eye contact causes irritation. Skin contact causes irritation. The product has not been tested. The statement has been derived from products of a similar structure and composition. Information on calcium oxide
Corrosive! Damages skin and eyes. Information on: crystalline silica
Not irritating to the skin. The product has not been tested. The statement has been derived from products of a similar structure and composition. May cause slight irritation to the eyes
Sensitization:
Sensitization after skin contact possible. The substance may cause sensitization of the respiratory tract.
Information on: TDI
The substance may cause sensitization of the respiratory tract
Sensitization after skin contact possible
Studies in animals suggest that dermal exposure may lead to pulmonary sensitization
However, the relevance of this result for humans is unclear.

Repeated dose toxicity:
Information on: TDI
The substance may cause damage to the lung even after repeated inhalation of low doses, as shown in animal studies
Information on: talc
The substance may cause damage to the lung after repeated inhalation.
Information on: Stoddard solvent
Overexposure may cause liver and kidney toxicity
Repeated exposures may result in pulmonary congestion
Information on: crystalline silica
This product may contain greater than 0.1% crystalline silica
Repeated exposure to high concentrations results in silicosis, a lung disease characterized by coughing, difficult breathing, wheezing, scarring of the lungs, and repeated, non-specific chest illnesses.

Potential environmental effects

Aquatic toxicity:
Acutely harmful for aquatic organisms
May cause long-term adverse effects in the aquatic environment

4. First-aid measures

General advice:
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:
Wash affected areas thoroughly with soap and water. Immediate medical attention required

If in eyes:
In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Immediate medical attention required

If swallowed:
Rinse mouth and then drink plenty 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

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

5. Fire-fighting measures

Flash point:	101.11 °C	
Lower explosion limit:		No data available
Upper explosion limit:		No data available

Suitable extinguishing media:
water fog, foam, carbon dioxide

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

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

6. Accidental release measures

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

Environmental precautions:
Do not discharge into drains/surface waters/groundwater

Cleanup:
Dike spillage.

For small amounts: Absorb isocyanate with suitable absorbent material (see § 40 CFR, sections 260, 264 and 265 for further information). Shovel into open container. Do not make container pressure tight. Move container to a well-ventilated area (outside). Spill area can be decontaminated with the following recommended decontamination solution: Mixture of 90 % water, 8 % concentrated ammonia, 2 % detergent. Add at a 10 to 1 ratio. Allow to stand for at least 48 hours to allow escape of evolved carbon dioxide.
For large amounts: 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: Wash down spill area with decontamination solution. Allow solution to stand for at least 10 minutes

7. Handling and storage

Handling

General advice:
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 explosion proofing necessary

Storage

General advice:
Formation of CO2 and build up of pressure possible. Protect against contamination 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 incompatibility:
General: Segregate from bases.

Storage stability:
Storage temperature: 65 - 105 °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 and personal protection

Components with workplace control parameters

Limestone	OSHA	PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ;
Titanium dioxide	OSHA	PEL 15 mg/m3 Total dust ;
	ACGIH	TWA value 10 mg/m3 ;
talc	OSHA	TWA value 20 millions of particles per cubic foot of air ; TWA value 2 4 millions of particles per cubic foot of air Respirable ; TWA value 0 1 mg/m3 Respirable ; TWA value 0 3 mg/m3 Total dust ;
	ACGIH	TWA value 2 mg/m3 Respirable fraction ;
Stoddard solvent	OSHA	PEL 500 ppm 2,900 mg/m3 ;
	ACGIH	TWA value 100 ppm ;
calcium oxide	OSHA	PEL 5 mg/m3 ;
	ACGIH	TWA value 2 mg/m3 ;
toluene-2,4-diisocyanate	OSHA	CLV 0 02 ppm 0 14 mg/m3 ;
	ACGIH	TWA value 0 005 ppm ; STEL value 0 02 ppm ;
crystalline silica	OSHA	TWA value 2.4 millions of particles per cubic foot of air Respirable ; TWA value 0 1 mg/m3 Respirable ; TWA value 0.3 mg/m3 Total dust ;
	ACGIH	TWA value 0 025 mg/m3 Respirable fraction ;

Advice on system design:
Provide local exhaust ventilation to control vapours/mists

Personal protective equipment

Respiratory protection:
For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions 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.

Hand protection:
Chemical resistant protective gloves, Suitable materials, chloroprene rubber (Neoprene), chlorinated polyethylene polyvinylchloride (Pylox), butyl rubber, fluoroelastomer (Viton), nitrile rubber (Buna N)

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

Body protection:
Suitable materials saran-coated material

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 Contaminated equipment or clothing should be cleaned after each use or disposed of.

9. Physical and chemical properties

Form:	liquid	
Odour:	solvent-like	
Colour:	pigmented	
pH value:		not applicable
Boiling point:		Unspecified
Vapour pressure:		No data available
Density:	0 895 g/cm3	
Relative density:	0.895	
Vapour density:		Heavier than air
Partitioning coefficient n-octanol/water (log Pow):		No data available.
Solubility in water:		slightly soluble

10. Stability and reactivity

Conditions to avoid:
> 40 degrees Celsius
Avoid moisture.

Substances to avoid:
water alcohols, strong bases

Hazardous reactions:
The product is chemically stable
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 violent reaction Risk of polymerization Contact with certain rubbers and plastics can cause brittleness of the substance/product with subsequent loss in strength.

Decomposition products:
Hazardous decomposition products: TDI carbon monoxide hydrogen cyanide nitrogen oxides aromatic isocyanates, gases/vapours

Oxidizing properties:
Based on its structural properties the product is not classified as oxidizing

11. Toxicological information

<u>Acute toxicity</u>

Oral:
LD50/rat: 5,800 mg/kg
Slightly toxic.

Inhalation:
LC50/rat: <= 0 78 mg/l / 1 h
Moderately toxic.
LC50/rat: 0.1 mg/l / 4 h
Moderately toxic

Dermal:
LD50/rabbit: > 9 400 mg/kg
Practically nontoxic

Skin irritation:
rabbit: (FHSA Guideline)

Chronic toxicity

Genetic toxicity:
The chemical structure does not suggest a mutagenic effect

Information on: TDI
The substance was mutagenic in various test systems with bacterias and cell cultures; however: these results could not be confirmed in tests with mammals.

Carcinogenicity:
No compound related carcinogenic effects.

Information on: TDI
A clear indication of an increased risk of cancer in humans has so far not been shown.
In long-term studies a carcinogenic effect was observed when the substance was given orally to laboratory animals(gavage)
Not carcinogenic in laboratory animals after long-term inhalation exposures.
Information on: crystalline silica
The International Agency for Research on Cancer (IARC) has classified this substance as a Group 1 (known) human carcinogen
Information on: talc
In long-term animal studies in which the substance was given by inhalation in high concentrations a carcinogenic effect was observed.

Reproductive toxicity:
No reproductive effects.

Information on: TDI
The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity/teratogenicity:
Information on: TDI
No indications of a developmental toxic / teratogenic effect were seen in animal studies.
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12. Ecological information

Poorly biodegradable.
The product is unstable in water. The elimination data also refer to products of hydrolysis.

Environmental toxicity

Acute and prolonged toxicity to fish:
static
zebra fish/LC50 (24 h): > 500 mg/l
Practically nontoxic

Acute toxicity to aquatic invertebrates:
static
Grass shrimp/LC50 (96 h): approx. 508 mg/l
Practically nontoxic
static
Pond snail/LC50 (24 h): > 500 mg/l
Practically nontoxic

Chronic toxicity to aquatic invertebrates:
Daphnia magna EC50 (24 h) approx. 750 mg/l
Practically nontoxic
Daphnia magna EC50 (24 h) > 500 mg/l
Practically nontoxic

Other terrestrial non-mammals:
OECD Guideline 205 redwinged blackbird/LD50: 100 mg/kg = 100
OECD Guideline 205 European Starling/LD50: > 100 mg/kg = > 100

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

Container disposal:
Empty containers must be neutralized with a decontaminant. Refer to 40 CFR § 261.7 (residues of hazardous waste in empty containers). Recommend crushing, puncturing or other means to prevent unauthorized use of used containers. Under no circumstances should empty drums be burned or cut open with gas or electric torch as toxic decomposition products may be liberated.

RCRA: U223

14. Transport information

Land transport
USDOT

Not classified as a dangerous good under transport regulations

Sea transport
IMDG

Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory information

Federal Regulations

Registration status:

TSCA US released / listed

OSHA hazard category: IARC 1 2A or 2B carcinogen, NTP listed carcinogen, Chronic target organ effects reported, OSHA PEL established ACGIH TLV established

SARA hazard categories (EPCRA 311/312): Acute Chronic

SARA 313:

CAS Number	Chemical name
584-84-9	toluene-2,4-diisocyanate

State regulations

State RTK

CAS Number	Chemical name	State RTK
1317-65-3	Limestone	MA, PA
112-62-9	methyl oleate	MA
13463-67-7	Titanium dioxide	MA, NJ, PA
14807-96-6	talc	MA, NJ PA
8052-41-3	Stoddard solvent	MA, NJ, PA
1305-78-8	calcium oxide	MA, NJ, PA
584-84-9	toluene-2,4-diisocyanate	MA, NJ, PA
14808-60-7	crystalline silica	MA, NJ, PA

CA Prop. 65:
THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

16. Other information

HMIS III rating
Health: 3¤ Flammability: 1 Physical hazard: 0

HMIS uses a numbering scale ranging from 0 to 4 to indicate the degree of hazard A value of zero means that the substance possesses essentially no hazard; a rating of four indicates high hazard

Local contact information
BASF Construction Chemicals
bcc_prps@basf.com

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