

## Safety Data Sheet

### ULTRABOND LANDSCAPE TURF CG

Safety Data Sheet dated: 10/28/2019 - version 1

Date of first edition: 10/28/2019

## 1. IDENTIFICATION

### Product identifier

Mixture identification:

Trade name: ULTRABOND LANDSCAPE TURF CG

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

Recommended use: Adhesive

Restrictions on use: N.A.

### Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company: MAPEI CORP. (USA and Puerto Rico)

1144 East Newport Center Drive

33442 - Deerfield Beach - FL - USA

Phone: 954-246-8888

### Emergency 24 hour numbers:

(USA) CHEMTREC 1-800-424-9300

(Canada) CANUTEC 1-613-996-6666

## 2. HAZARD(S) IDENTIFICATION



### Classification of the chemical

Skin Irrit. 2	Causes skin irritation.
Eye Irrit. 2A	Causes serious eye irritation.
Resp. Sens. 1	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1	May cause an allergic skin reaction.
STOT RE 2	May cause damage to organs through prolonged or repeated exposure if inhaled, in contact with skin and if swallowed.
Carc. 2	Suspected of causing cancer if inhaled, in contact with skin and if swallowed.

### Label elements

#### Pictograms and Signal Words



Danger

### Hazard statements:

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H351	Suspected of causing cancer if inhaled, in contact with skin and if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure if inhaled, in contact with skin and if swallowed.

### Precautionary statements:

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust or mist.
P264	Wash skin thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	[In case of inadequate ventilation] wear respiratory protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P321	Specific treatment (see supplementary instructions on this label).
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P342+P311	If experiencing respiratory symptoms: Call a doctor.
P362+P364	Take off contaminated clothing and wash it before reuse.
P405	Store locked up.
P501	Dispose of contents/container in accordance with applicable regulations.

**Ingredient(s) with unknown acute toxicity:**

None

**Hazards not otherwise classified identified during the classification process:**

None

This product contains crystalline silica (quartz sand). IARC has classified crystalline silica as a Group 1 carcinogen. Both IARC and NTP consider silica as a known human carcinogen. Evidence is based on the chronic and long-term exposure workers have had to respirable sized crystalline silica dust particles. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of the hardened product may create a silica dust hazard)

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substances**

N.A.

**Mixtures**

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

**List of components**

Quantity	Name	Ident. Numb.	Classification	Registration Number
5-10 %	Methylenediphenyl diisocyanate (MDI)	CAS:26447-40-5	STOT RE 2, H373; Eye Irrit. 2A, H319; STOT SE 3, H335; Skin Irrit. 2, H315; Resp. Sens. 1, H334; Skin Sens. 1, H317; Acute Tox. 4, H332; Carc. 2, H351	
5-10 %	4,4'-Methylenediphenyl diisocyanate	CAS:101-68-8	Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335; STOT RE 2, H373; Carc. 2, H351; Resp. Sens. 1, H334; Skin Sens. 1, H317	
1-2.5 %	4-Methylbenzenesulfonyl isocyanate	CAS:4083-64-1	Eye Irrit. 2A, H319; STOT SE 3, H335; Skin Irrit. 2, H315; Resp. Sens. 1, H334	
0.1-0.25 %	Silica Sand	CAS:14808-60-7	STOT RE 1, H372; Carc. 1A, H350	

**4. FIRST AID MEASURES**

**Description of first aid measures**

In case of skin contact:

- Immediately take off all contaminated clothing.
- OBTAIN IMMEDIATE MEDICAL ATTENTION.
- Obtain medical attention if skin related symptoms persist.
- Remove contaminated clothing immediately and dispose of safely.
- After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

- After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.
- Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

**Most important symptoms/effects, acute and delayed**

Eye irritation

Eye damages

Skin Irritation

Erythema

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

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**5. FIRE-FIGHTING MEASURES**

**Extinguishing media**

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

**Unsuitable extinguishing media:**

None in particular.

**Specific hazards arising from the chemical**

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

**Special protective equipment and precautions for fire-fighters**

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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**6. ACCIDENTAL RELEASE MEASURES**

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

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

**Methods and material for containment and cleaning up**

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

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**7. HANDLING AND STORAGE**

**Precautions for safe handling**

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

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

Storage temperature: N.A.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

## List of components with OEL value

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour	Note
Methylenediphenyl diisocyanate (MDI)	OSHA		C			0,2	0,02		
4,4'-Methylenediphenyl diisocyanate	ACGIH				0,005				respiratory sensitization (listed under Methylene bisphenyl isocyanate (MDI));
Silica Sand	OSHA		C			0,2	0,02		
	ACGIH			0,025					A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis;

Appropriate engineering controls: N.A.

### Individual protection measures

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use adequate protective respiratory equipment.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical state: Liquid

Appearance and colour: paste green

Odour: N.A.

Odour threshold: N.A.

pH: 9.75

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: >94 °C (201 °F)

Evaporation rate: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 1.02 g/cm<sup>3</sup>

Solubility in water: N.A.

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Viscosity: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Solid/gas flammability: N.A.

### Other information

Substance Groups relevant properties N.A.

Miscibility: N.A.

Fat Solubility: N.A.

Conductivity: N.A.

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## 10. STABILITY AND REACTIVITY

### Reactivity

Stable under normal conditions

**Chemical stability**

Data not available.

**Possibility of hazardous reactions**

None.

**Conditions to avoid**

Stable under normal conditions.

**Incompatible materials**

None in particular.

**Hazardous decomposition products**

None.

**11. TOXICOLOGICAL INFORMATION****Information on toxicological effects****Toxicological information of the mixture:**

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

**Toxicological information on main components of the mixture:**

Methylenediphenyl diisocyanate (MDI)	a) acute toxicity	LD50 Skin Rabbit > 6200 mg/kg  LC50 Inhalation Rat = 369 mg/l 4h LD50 Oral Rat > 7400 mg/kg
4,4'-Methylenediphenyl diisocyanate	a) acute toxicity	LC50 Inhalation Rat = 369 mg/m3 4h
4-Methylbenzenesulfonyl isocyanate	a) acute toxicity	LC50 Inhalation Rat > 640 ppm 1h
Silica Sand	a) acute toxicity	LD50 Oral Rat = 500 mg/kg

**If not differently specified, the information required in the regulation and listed below must be considered as N.A.**

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- k) Toxicological kinetics, metabolism and distribution information
- i) STOT-repeated exposure
- j) aspiration hazard

**Substance(s) listed on the IARC Monographs:**

Methylenediphenyl diisocyanate (MDI)	Group 3
4,4'-Methylenediphenyl diisocyanate	Group 3
Silica Sand	Group 1

**Substance(s) listed as OSHA Carcinogen(s):**

Silica Sand

**Substance(s) listed as NIOSH Carcinogen(s):**

**Substance(s) listed on the NTP report on Carcinogens:**

Silica Sand

**12. ECOLOGICAL INFORMATION****Toxicity**

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

**List of components with eco-toxicological properties**

Quantity	Component	Ident. Numb.	Ecotox Infos
5-10 %	Methylenediphenyl diisocyanate (MDI)	CAS: 26447-40-5	d) Terrestrial toxicity : LC50 Worm Eisenia foetida > 1000 mg/kg 14d IUCLID  d) Terrestrial toxicity : NOEC Worm Eisenia foetida >= 1000 mg/kg 14d IUCLID
0.1-0.25 %	Silica Sand	CAS: 14808-60-7	a) Aquatic acute toxicity : LC50 carp > 10000,00000 mg/L 72h

**Persistence and degradability**

N.A.

**Bioaccumulative potential**

N.A.

**Mobility in soil**

N.A.

**Other adverse effects**

N.A.

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.

**14. TRANSPORT INFORMATION**

Not classified as dangerous in the meaning of transport regulations.

**UN number**

ADR-UN number: N.A.

DOT-UN Number: N.A.

IATA-Un number: N.A.

IMDG-Un number: N.A.

**UN proper shipping name**

ADR-Shipping Name: N.A.

DOT-Proper Shipping Name: N.A.

IATA-Technical name: N.A.

IMDG-Technical name: N.A.

**Transport hazard class(es)**

ADR-Class: N.A.

DOT-Hazard Class: N.A.

IATA-Class: N.A.

IMDG-Class: N.A.

**Packing group**

ADR-Packing Group: N.A.

DOT-Packing group: N.A.

IATA-Packing group: N.A.

IMDG-Packing group: N.A.

**Environmental hazards**

Marine pollutant: No

Environmental Pollutant: N.A.

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

N.A.

**Special precautions**

Department of Transportation (DOT):

N.A.

Road and Rail (ADR-RID):

N.A.

Air (IATA):

N.A.

Sea (IMDG):

N.A.

**15. REGULATORY INFORMATION****USA - Federal regulations****TSCA - Toxic Substances Control Act****TSCA inventory:**

All the components are listed on the TSCA inventory

**TSCA listed substances:**

Methylenediphenyl diisocyanate (MDI) is listed in TSCA Section 8b Section 8a - PAIR

4,4'-Methylenediphenyl diisocyanate is listed in TSCA Section 8b Section 8a - PAIR

4-Methylbenzenesulfonyl isocyanate is listed in TSCA Section 8b

Silica Sand is listed in TSCA Section 8b

**SARA - Superfund Amendments and Reauthorization Act****Section 302 - Extremely Hazardous Substances:**

no substances listed

**Section 304 - Hazardous substances:**

4,4'-Methylenediphenyl diisocyanate

**Section 313 - Toxic chemical list:**

4,4'-Methylenediphenyl diisocyanate

**CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act****Substance(s) listed under CERCLA:**

4,4'-Methylenediphenyl diisocyanate Reportable quantity: 5000 pounds

**CAA - Clean Air Act****CAA listed substances:**

4,4'-Methylenediphenyl diisocyanate is listed in CAA Section 112(b) - HAP Section 112(b) - HON

**CWA - Clean Water Act****CWA listed substances:**

no substances listed

**USA - State specific regulations****California Proposition 65****Substance(s) listed under California Proposition 65:**

Silica Sand Listed as carcinogen

**Massachusetts Right to know****Substance(s) listed under Massachusetts Right to know:**

Methylenediphenyl diisocyanate (MDI)

4,4'-Methylenediphenyl diisocyanate

Silica Sand

**Pennsylvania Right to know****Substance(s) listed under Pennsylvania Right to know:**

4,4'-Methylenediphenyl diisocyanate

Silica Sand

**New Jersey Right to know**

**Substance(s) listed under New Jersey Right to know:**

Methylenediphenyl diisocyanate (MDI)  
4,4'-Methylenediphenyl diisocyanate  
Silica Sand

**Canada - Federal regulations**

**DSL - Domestic Substances List**

**DSL Inventory:**

All the substances are listed in the DSL.

**NDSL - Non Domestic Substances List**

**NDSL Inventory:**

no substances listed

**NPRI - National Pollutant Release Inventory**

**Substances listed in NPRI:**

no substances listed

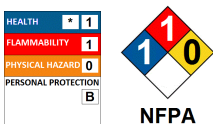
**16. OTHER INFORMATION**

Code	Description
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H350	May cause cancer .
H351	Suspected of causing cancer .
H351	Suspected of causing cancer if inhaled, in contact with skin and if swallowed.
H372	Causes damage to organs through prolonged or repeated exposure .
H373	May cause damage to organs through prolonged or repeated exposure .
H373	May cause damage to organs through prolonged or repeated exposure if inhaled, in contact with skin and if swallowed.

Safety Data Sheet dated: 10/28/2019 - version 1

Product code: 9023332

**Additional classification information**



HMIS Health: 1 = Slight  
 HMIS Health - Is health hazard chronic? Yes  
 HMIS Flammability: 1 = Combustible if heated  
 HMIS Reactivity: 0 = Minimal  
 HMIS P.P.E.: Safety glasses, gloves  
 NFPA Health: 1 = Slight  
 NFPA Flammability: 1 = Combustible if heated  
 NFPA Reactivity: 0 = Minimal  
 NFPA Special Risk: N.A.

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

**Legend to abbreviations and acronyms used in the safety data sheet:**



ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.  
IMDG: International Maritime Code for Dangerous Goods.  
IATA: International Air Transport Association.  
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).  
ICAO: International Civil Aviation Organization.  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).  
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.  
CLP: Classification, Labeling, Packaging.  
EINECS: European Inventory of Existing Commercial Chemical Substances.  
INCI: International Nomenclature of Cosmetic Ingredients.  
CAS: Chemical Abstracts Service (division of the American Chemical Society).  
GefStoffVO: Ordinance on Hazardous Substances, Germany.  
LC50: Lethal concentration, for 50 percent of test population.  
LD50: Lethal dose, for 50 percent of test population.  
DNEL: Derived No Effect Level.  
PNEC: Predicted No Effect Concentration.  
TLV: Threshold Limiting Value.  
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).  
STEL: Short Term Exposure limit.  
STOT: Specific Target Organ Toxicity.  
WGK: German Water Hazard Class.  
KSt: Explosion coefficient.