

## Safety Data Sheet

### ULTRABOND TURF PU 1K GREEN

Safety Data Sheet dated: 09/24/2025 - version 10

Date of first edition: 04/16/2018



## 1. IDENTIFICATION

### Product identifier used on the label

Mixture identification:

Trade name: ULTRABOND TURF PU 1K GREEN

Trade code: 902335

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

Recommended use: Polyurethane-based adhesive

Restrictions on use: Not available

### Name, U.S. address, and U.S. 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

Responsible: RDProductSafety@mapei.com

### Emergency 24 hour numbers:

Emergency Number (USA/Canada) CHEMTREC 1(800) 424-9300 / 1(703) 527-3887

Emergency Transport CANUTEC (Canada) 1-613-996-6666

## 2. HAZARD(S) IDENTIFICATION



### Classification of the chemical

Skin irritation, Category 2

Causes skin irritation.

Eye irritation, Category 2A

Causes serious eye irritation.

Respiratory Sensitization, Category 1

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin Sensitization, Category 1

May cause an allergic skin reaction.

Carcinogenicity, Category 2

Suspected of causing cancer.

Specific target organ toxicity following repeated exposure, Category 2

May cause damage to organs through prolonged or repeated exposure if inhaled.

### Label elements

#### Hazard pictograms and Signal Word



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.

H373 May cause damage to organs through prolonged or repeated exposure if inhaled.

### 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 mist/vapours/spray.

P264 Wash skin thoroughly after handling.

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+P340      | IF INHALED: Remove person to fresh air and keep 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.                                                                           |
| P314           | Get medical advice/attention if you feel unwell.                                                                                 |
| 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.                                                                         |
| P501           | Dispose of contents/container in accordance with applicable regulations.                                                         |

**Hazards associated with foreseeable chemical reactions**

None

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

None

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

None

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substances**

Not Relevant

**Mixtures**

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

**List of components**

| Qty         | Name                                                                          | Ident. Numb.                                               | Classification                                                                                                                                         |
|-------------|-------------------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| ≥15 - <20 % | 4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato- | CAS:101-68-8<br>EC:202-966-0<br>EU CLP Index:615-005-00-9  | Acute Tox. 4, H332; Eye Irrit. 2A, H319; STOT SE 3, H335; Skin Irrit. 2, H315; Resp. Sens. 1, H334; Skin Sens. 1, H317; STOT RE 2, H373; Carc. 2, H351 |
| ≥1 - <2.5 % | 2,2-dimorpholinodiethylether; Bis(2-morpholinoethyl) Ether                    | CAS:6425-39-4<br>EC:229-194-7                              | Eye Irrit. 2A, H319                                                                                                                                    |
| ≥0.6 - <1 % | 4-methylbenzenesulfonyl isocyanate; 4-isocyanatosulphonyltoluene              | CAS:4083-64-1<br>EC:223-810-8<br>EU CLP Index:615-012-00-7 | Eye Irrit. 2A, H319; STOT SE 3, H335; Skin Irrit. 2, H315; Resp. Sens. 1, H334                                                                         |

The actual concentration of the components listed above is withheld as a trade secret.

**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).

Treatment:

(see paragraph 4.1)

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## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO<sub>2</sub>).

### 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: Not available

Explosive properties: Not Relevant

Oxidizing properties: Not Relevant

### 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.

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Limit leakages with earth or sand.

### Methods and material for containment and cleaning up

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

Retain contaminated washing water and dispose it.

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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

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

Storage temperature: Not available

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

### Occupational Exposure Limits (OEL)

|                                                                                                | OEL Type | Country | Occupational Exposure Limit                                                                           |
|------------------------------------------------------------------------------------------------|----------|---------|-------------------------------------------------------------------------------------------------------|
| 4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato-<br>CAS: 101-68-8 | ACGIH    |         | Long Term: 0,005 ppm<br>Resp sens                                                                     |
|                                                                                                | MAK      | GERMANY | Long Term: 0,05 mg/m3                                                                                 |
|                                                                                                | ACGIH    |         | Long Term: 0,005 ppm<br>respiratory sensitization (listed under Methylene bisphenyl isocyanate (MDI)) |
|                                                                                                | OSHA     |         | Short Term: Ceiling - 0,2 mg/m3 - 0,02 ppm                                                            |
|                                                                                                | MAK      | AUSTRIA | Long Term: 0,05 mg/m3 - 0,005 ppm; Short Term: 0,1 mg/m3 - 0,01 ppm                                   |
|                                                                                                | ACGIH    |         | Long Term: 0,005 ppm<br>respiratory sensitization (listed under Methylene bisphenyl isocyanate (MDI)) |
|                                                                                                | OSHA     |         | Short Term: Ceiling - 0,2 mg/m3 - 0,02 ppm                                                            |
|                                                                                                | EU       |         | Long Term: 0,006 mg/m3; Short Term: 0,012 mg/m3<br>Skin; Dermal and respiratory sensitisation         |
|                                                                                                |          |         |                                                                                                       |
|                                                                                                |          |         |                                                                                                       |

#### Predicted No Effect Concentration (PNEC) values

|                                                                                                |                                                                         |
|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| 4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato-<br>CAS: 101-68-8 | Exposure Route: Fresh Water; PNEC Limit: 1 mg/l                         |
|                                                                                                | Exposure Route: Marine water; PNEC Limit: 0,1 mg/l                      |
|                                                                                                | Exposure Route: Soil; PNEC Limit: 1 mg/kg                               |
|                                                                                                | Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 1 mg/l |
|                                                                                                | Exposure Route: Intermittent release; PNEC Limit: 10 mg/l               |
| 2,2-dimorpholinodiethylether; Bis(2-morpholinoethyl) Ether<br>CAS: 6425-39-4                   | Exposure Route: Fresh Water; PNEC Limit: 0,1 mg/l                       |
|                                                                                                | Exposure Route: Marine water; PNEC Limit: 0,01 mg/l                     |
|                                                                                                | Exposure Route: Freshwater sediments; PNEC Limit: 8,2 mg/kg             |
|                                                                                                | Exposure Route: Marine water sediments; PNEC Limit: 0,82 mg/kg          |
|                                                                                                | Exposure Route: Soil; PNEC Limit: 1,58 mg/kg                            |

#### Derived No Effect Level (DNEL) values

|                                                                                                |                                                                                                                  |
|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| 4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato-<br>CAS: 101-68-8 | Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects<br>Worker Industry: 50 mg/kg      |
|                                                                                                | Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects<br>Worker Industry: 0,1 mg/m3 |
|                                                                                                | Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects<br>Worker Industry: 0,1 mg/m3    |
|                                                                                                | Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects<br>Worker Industry: 0,05 mg/m3 |
|                                                                                                | Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects<br>Worker Industry: 0,05 mg/m3    |
|                                                                                                | Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects<br>Consumer: 25 mg/kg             |
|                                                                                                | Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects<br>Consumer: 0,05 mg/m3       |
|                                                                                                | Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects<br>Consumer: 20 mg/kg               |
|                                                                                                | Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects<br>Consumer: 0,05 mg/m3          |
|                                                                                                |                                                                                                                  |

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Consumer: 0,025 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects  
Consumer: 0,025 mg/m3

Exposure Route: Human Dermal; Exposure Frequency: Short Term, local effects  
Worker Industry: 28,7 mg/cm2; Consumer: 17,2 mg/cm2

2,2-  
dimorpholinodiethylether; Bis(2-morpholinoethyl)  
Ether  
CAS: 6425-39-4

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Worker Industry: 7,28 mg/m3

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects  
Worker Industry: 1 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Consumer: 1,8 mg/m3

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects  
Consumer: 0,5 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects  
Consumer: 0,5 mg/kg

Appropriate engineering controls: Not available

#### Individual protection measures

Eye protection:

Use close fitting safety goggles, don't use contact lenses.

Protection for skin:

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

Protection for hands:

Suitable materials for safety gloves; 29 CFR 1910.138 - ANSI/ISEA 105:

Polychloroprene - CR: thickness  $\geq 0,5\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Nitrile rubber - NBR: thickness  $\geq 0,35\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Butyl rubber - IIR: thickness  $\geq 0,5\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Fluorinated rubber - FKM: thickness  $\geq 0,4\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

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

Respiratory protection:

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to 29 CFR 1910.134 - CSA Z94.4 for information on selection and use of appropriate respiratory protection equipment.

Use adequate protective respiratory equipment.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

|                                               |                 |
|-----------------------------------------------|-----------------|
| Physical state:                               | Liquid          |
| Appearance and colour:                        | paste green     |
| Odour:                                        | odourless       |
| Odour threshold:                              | Not Relevant    |
| Melting point / freezing point:               | Not Relevant    |
| Initial boiling point and boiling range:      | Not Relevant    |
| Flammability:                                 | Not Relevant    |
| Upper/lower flammability or explosive limits: | Not Relevant    |
| Flash point:                                  | 100 °C (212 °F) |
| Auto-ignition temperature:                    | Not Relevant    |
| Decomposition temperature:                    | Not Relevant    |
| pH:                                           | Not Relevant    |
| Viscosity:                                    | 70.00 mPA-s     |

|                                          |                                     |
|------------------------------------------|-------------------------------------|
| Kinematic viscosity:                     | > 20,5 mm <sup>2</sup> /sec (40 °C) |
| Solubility in water:                     | insoluble                           |
| Solubility in oil:                       | partly soluble                      |
| Partition coefficient (n-octanol/water): | Not Relevant                        |
| Vapour pressure:                         | Not Relevant                        |
| Evaporation rate:                        | Not Relevant                        |
| Relative density:                        | 1.06 g/cm <sup>3</sup>              |
| Vapour density:                          | Not Relevant                        |

#### Particle characteristics:

|                |                   |
|----------------|-------------------|
| Particle size: | No data available |
|----------------|-------------------|

#### Other information

|                                       |              |
|---------------------------------------|--------------|
| Explosive properties:                 | Not Relevant |
| Oxidizing properties:                 | Not Relevant |
| Solid/gas flammability:               | Not Relevant |
| Substance Groups relevant properties: | Not Relevant |
| Miscibility:                          | Not Relevant |
| Fat Solubility:                       | Not Relevant |
| Conductivity:                         | Not Relevant |

## 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 Preparation

|                                      |                                                                                                              |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------|
| a) acute toxicity                    | Not classified                                                                                               |
|                                      | Based on available data, the classification criteria are not met                                             |
| b) skin corrosion/irritation         | The product is classified: Skin irritation, Category 2(H315)                                                 |
| c) serious eye damage/irritation     | The product is classified: Eye irritation, Category 2A(H319)                                                 |
| d) respiratory or skin sensitisation | The product is classified: Respiratory Sensitization, Category 1(H334), Skin Sensitization, Category 1(H317) |
| e) germ cell mutagenicity            | Not classified                                                                                               |
|                                      | Based on available data, the classification criteria are not met                                             |
| f) carcinogenicity                   | The product is classified: Carcinogenicity, Category 2(H351)                                                 |
| g) reproductive toxicity             | Not classified                                                                                               |
|                                      | Based on available data, the classification criteria are not met                                             |
| h) STOT-single exposure              | Not classified                                                                                               |

|                           |                                                                                                         |
|---------------------------|---------------------------------------------------------------------------------------------------------|
|                           | Based on available data, the classification criteria are not met                                        |
| i) STOT-repeated exposure | The product is classified: Specific target organ toxicity following repeated exposure, Category 2(H373) |
| j) aspiration hazard      | Not classified                                                                                          |
|                           | Based on available data, the classification criteria are not met                                        |

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

|                                                                               |                          |                                           |      |
|-------------------------------------------------------------------------------|--------------------------|-------------------------------------------|------|
| 4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato- | a) acute toxicity        | LD50 Oral Rat > 2000 mg/kg                |      |
|                                                                               | f) carcinogenicity       | Carcinogenicity Inhalation Rat = 6, mg/m3 | 2 y  |
|                                                                               | g) reproductive toxicity | NOAEL Inhalation Rat = 12, mg/m3          | 20 d |
| 2,2-dimorpholinodiethylether; Bis(2-morpholinoethyl) Ether                    | a) acute toxicity        | LD50 Skin Rabbit = 3038 mg/kg             |      |
|                                                                               |                          | LD50 Oral Rat = 2025 mg/kg                |      |
|                                                                               |                          | LD50 Oral Rat 300 mg/kg                   |      |
| 4-methylbenzenesulfonyl isocyanate; 4-isocyanatosulphonyltoluene              | a) acute toxicity        | LC50 Inhalation Rat > 640 ppm 1h          |      |
|                                                                               |                          | LD50 Oral Rat = 2234 mg/kg                |      |

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

|                                                                               |         |
|-------------------------------------------------------------------------------|---------|
| 4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato- | Group 3 |
|-------------------------------------------------------------------------------|---------|

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

None

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

None

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

None

## 12. ECOLOGICAL INFORMATION

### Toxicity

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

Eco-Toxicological Information:

#### List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

Based on available data, the classification criteria are not met

#### List of Eco-Toxicological properties of the components

| Component                                                                     | Ident. Numb.                                            | Ecotox Data                                                 |
|-------------------------------------------------------------------------------|---------------------------------------------------------|-------------------------------------------------------------|
| 4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato- | CAS: 101-68-8 - EINECS: 202-966-0 - INDEX: 615-005-00-9 | a) Aquatic acute toxicity : LC50 Fish > 1000 mg/L 96        |
|                                                                               |                                                         | a) Aquatic acute toxicity : EC50 Daphnia > 1000 mg/L 24     |
|                                                                               |                                                         | b) Aquatic chronic toxicity : NOEC Daphnia > 10 mg/L - 21 d |
|                                                                               |                                                         | a) Aquatic acute toxicity : EC50 Algae > 1640 mg/L 72       |
|                                                                               |                                                         | c) Bacteria toxicity : EC50 > 100 mg/L 3                    |
|                                                                               |                                                         | d) Terrestrial toxicity : NOEC > 1000 mg/kg - 14 d          |

2,2-dimorpholinodiethylether;  
Bis(2-morpholinoethyl) Ether

CAS: 6425-39-4  
- EINECS: 229-194-7

e) Plant toxicity : NOEC > 1000 mg/kg - 14 d

a) Aquatic acute toxicity : LC50 Fish > 2150 mg/L 96

a) Aquatic acute toxicity : EC50 Daphnia > 100 mg/L 48

a) Aquatic acute toxicity : LC50 Fish Danio rerio > 2150 mg/L 96h ECHA

#### **Persistence and degradability**

N.A.

#### **Bioaccumulative potential**

N.A.

#### **Mobility in soil**

N.A.

#### **Other adverse effects**

N.A.

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### **13. DISPOSAL CONSIDERATIONS**

#### **Waste treatment methods**

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

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### **14. TRANSPORT INFORMATION**

Not classified as dangerous in the meaning of transport regulations.

#### **UN number**

DOT-UN Number: Not Applicable

ADR-UN number: Not Applicable

IATA-Un number: Not Applicable

IMDG-Un number: Not Applicable

#### **UN proper shipping name**

DOT-Proper Shipping Name: Not Applicable

ADR-Shipping Name: Not Applicable

IATA-Technical name: Not Applicable

IMDG-Technical name: Not Applicable

#### **Transport hazard class(es)**

DOT-Hazard Class: Not Applicable

ADR-Class: Not Applicable

IATA-Class: Not Applicable

IMDG-Class: Not Applicable

#### **Packing group**

DOT Packing Group: Not Applicable

ADR-Packing Group: Not Applicable

IATA-Packing group: Not Applicable

IMDG-Packing group: Not Applicable

#### **Environmental hazards**

Marine pollutant: No

Environmental Pollutant: Not Applicable  
DOT-RQ: Yes DOT-RQ - Quantity: 5000 lbs

Transport in bulk according to IMO instruments

N.A.  
Not Applicable

Special precautions

Department of Transportation (DOT):  
Not Applicable  
Road and Rail (ADR-RID):  
Not Applicable  
Air (IATA):  
Not Applicable  
Sea (IMDG):  
Not Applicable

15. REGULATORY INFORMATION

This Safety Data Sheet has been prepared according to the Hazard Communication Standard 2024 (HCS 2024)

USA - Federal regulations

TSCA - Toxic Substances Control Act

All the components are listed on the TSCA inventory  
**TSCA listed substances:**  
4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato- is listed in TSCA Section 8b Section 8a - PAIR Section 5  
2,2-dimorpholinodiethylether; Bis(2-morpholinoethyl) Ether is listed in TSCA Section 8b  
4-methylbenzenesulfonyl isocyanate; 4-isocyanatosulphonyltoluene 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; benzene, 1,1'-methylenebis[4-isocyanato-  
**Section 313 - Toxic chemical list:**  
4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato-

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

**Substance(s) listed under CERCLA:**  
4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato- Reportable quantity: 5000 pounds

CAA - Clean Air Act

**CAA listed substances:**  
4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato- 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:**  
No substances listed

Massachusetts Right to know

**Substance(s) listed under Massachusetts Right to know:**  
4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato-

Pennsylvania Right to know

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

4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato-

#### New Jersey Right to know

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

4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato-

#### Canada - Federal regulations

##### DSL - Domestic Substances List

All the substances are listed in the DSL.

##### NDSL - Non Domestic Substances List

This product complies with NDSL inventory

##### NPRI - National Pollutant Release Inventory

##### NPRI (National Pollutant Release Inventory) - List of substances listed.

No substances listed

## 16. OTHER INFORMATION

Safety Data Sheet dated: 9/24/2025 - version 10

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.

| 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.                                             |
| H351 | Suspected of causing cancer.                                                  |
| H373 | May cause damage to organs through prolonged or repeated exposure if inhaled. |

| Code        | Hazard class and hazard category | Description                                                            |
|-------------|----------------------------------|------------------------------------------------------------------------|
| A.1/4/Inhal | Acute Tox. 4                     | Acute toxicity (inhalation), Category 4                                |
| A.2/2       | Skin Irrit. 2                    | Skin irritation, Category 2                                            |
| A.3/2A      | Eye Irrit. 2A                    | Eye irritation, Category 2A                                            |
| A.4.1/1     | Resp. Sens. 1                    | Respiratory Sensitization, Category 1                                  |
| A.4.2/1     | Skin Sens. 1                     | Skin Sensitization, Category 1                                         |
| A.6/2       | Carc. 2                          | Carcinogenicity, Category 2                                            |
| A.8/3       | STOT SE 3                        | Specific target organ toxicity following single exposure, Category 3   |
| A.9/2       | STOT RE 2                        | Specific target organ toxicity following repeated exposure, Category 2 |

#### 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.

EU CLP Index: Index number as reported in Annex VI to EU Reg. 1272/2008

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.

**Paragraphs modified from the previous revision:**

- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 14. TRANSPORT INFORMATION
- 16. OTHER INFORMATION