# SAFETY DATA SHEET

**In accordance with OSHA 29 CFR 1910.1200**

**GRIP-N-SHIELD(TM)**
**Revision Number** 2.01

**Revision date** 15-May-2025
**Supersedes date** 18-Apr-2019

## 1. Identification

### 1.1. Product identifier

**Product Name** GRIP-N-SHIELD(TM)

**Other means of identification**
**Other information** Not applicable

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

**Recommended use** Adhesives
**Restrictions on use** No information available

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

**Responsible Party**
Bostik Inc.
11320 W. Watertown Plank Road
Wauwatosa, Wisconsin 53226 USA
Phone: +1(800) 726-7845 (Domestic Toll Free)
Phone: +1 (414) 774-2250 (International)

**E-mail** msds@bostik.com

### 1.4. Emergency telephone number

**Emergency Telephone** CHEMTREC (Chemical Transportation Emergency Center)
Chemtrec: 1-800-424-9300 (US) , 1-703-527-3887 (Outside U.S.)
**Rocky Mountain Poison Center:** 1-866-767-5089

## 2. Hazard(s) identification

### 2.1. Classification of the substance or mixture

| | |
|---|---|
| Respiratory sensitization | Category 1 |
| Skin sensitization | Category 1 |
| Reproductive toxicity | Category 1B |
| Specific target organ toxicity (repeated exposure) | Category 2 |

**Hazards not otherwise classified (HNOC)**
Not applicable

### 2.2. Label elements

**EMERGENCY OVERVIEW**

**Danger**

**Hazard statements**
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
May damage fertility or the unborn child

May cause damage to organs through prolonged or repeated exposure

**Appearance** Paste **Physical state** Liquid **Odor** No information available

**Precautionary Statements - Prevention**
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection
In case of inadequate ventilation wear respiratory protection
Contaminated work clothing must not be allowed out of the workplace
Do not breathe dust/fume/gas/mist/vapors/spray

**Precautionary Statements - Response**
IF exposed or concerned: Get medical advice/attention
IF ON SKIN: Wash with plenty of water and soap
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse
IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing
If experiencing respiratory symptoms: Call a POISON CENTER or doctor

**Precautionary Statements - Storage**
Store locked up

**Precautionary Statements - Disposal**
Dispose of contents/container to an approved waste disposal plant

### 2.3. Other Information

Causes mild skin irritation.

## 3. Composition/information on ingredients

### 3.1. Substances

Not applicable.

### Mixture

| Chemical name | CAS No. | Weight-% |
|---|---|---|
| Limestone | 1317-65-3 | 30 - 60 |
| 4,4'-Methylenediphenyl diisocyanate | 101-68-8 | 1 - <5 |
| o-(p-isocyanatobenzyl)phenyl isocyanate | 5873-54-1 | 1 - <5 |
| Propylene carbonate | 108-32-7 | 1 - <5 |
| Carbon black | 1333-86-4 | 0.1 - <1 |
| Benzene, 1,1'-methylenebis[4-isocyanato-, homopolymer, isobutyl alcohol-blocked | 201615-11-4 | 0.1 - <1 |
| 4-isocyanatosulphonyltoluene tosyl isocyanate | 4083-64-1 | 0.1 - <1 |

| | | |
|---|---|---|
| Dibutyltin dilaurate | 77-58-7 | 0.1 - <1 |

**The exact percentage (concentration) of composition has been withheld as a trade secret*

## 4. First-aid measures

### 4.1. Description of first aid measures

**General advice** Show this safety data sheet to the doctor in attendance.

**Inhalation** May cause allergic respiratory reaction. Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Get immediate medical attention.

**Eye contact** Rinse thoroughly with plenty of water, also under the eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. If symptoms persist, call a physician.

**Skin contact** May cause an allergic skin reaction. May cause sensitization by skin contact. Wash off immediately with soap and plenty of water. Take off contaminated clothing and wash before reuse. In the case of skin irritation or allergic reactions see a physician.

**Ingestion** May produce an allergic reaction. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get immediate medical attention.

**Self-protection of the first aider** Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. See section 8 for more information.

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

**Symptoms** May cause allergy or asthma symptoms or breathing difficulties if inhaled. Coughing and/ or wheezing. Itching. Rashes. Hives. Prolonged contact may cause redness and irritation.

**Effects of Exposure** No information available.

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

**Note to physicians** May cause sensitization in susceptible persons. Treat symptomatically.

## 5. Fire-Fighting Measures

### 5.1. Extinguishing media

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Large Fire** CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

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

**Specific hazards arising from the chemical** Product is or contains a sensitizer. May cause sensitization by inhalation. May cause sensitization by skin contact. Thermal decomposition can lead to release of irritating and

toxic gases and vapors.

**Hazardous combustion products** Carbon oxides. Carbon dioxide (CO2). Nitrogen oxides (NOx). Hydrogen cyanide. Isocyanates.

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

**5.3. Advice for firefighters**

**Special protective equipment and precautions for fire-fighters** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. Accidental Release Measures

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

**Personal precautions** Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling.

**Other information** Refer to protective measures listed in Sections 7 and 8.

**6.2. Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological Information.

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

**Methods for containment** Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

**Methods for cleaning up** Use personal protective equipment as required. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

**Reference to other sections** See section 8 for more information. See section 13 for more information.

## 7. Handling and storage

**7.1. Precautions for safe handling**

**Advice on safe handling** Use personal protective equipment as required. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Ensure adequate ventilation. Use with local exhaust ventilation. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Take off contaminated clothing and wash before reuse.

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

**Storage Conditions** Keep out of the reach of children. Keep in properly labeled containers. Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Protect from moisture.

**Recommended storage temperature** Keep at temperatures between 50 and 95 °F / 10 and 35 °C.

### 7.3 References to other sections

**Reference to other sections** Section 10: STABILITY AND REACTIVITY
Section 13: DISPOSAL CONSIDERATIONS

## 8. Exposure Controls/Personal Protection

### 8.1. Control parameters

**Exposure Limits** This product contains substances which in their raw state are powder form, however in this product they are in a non-respirable form. Inhalation of powder/dust particles is unlikely to occur from exposure to this product.

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH |
|---|---|---|---|
| Limestone<br>1317-65-3 | - | TWA: 15 mg/m³ total dust<br>TWA: 5 mg/m³ respirable fraction<br>(vacated) TWA: 15 mg/m³ total dust<br>(vacated) TWA: 5 mg/m³ respirable fraction | TWA: 10 mg/m³ total dust<br>TWA: 5 mg/m³ respirable dust |
| 4,4'-Methylenediphenyl diisocyanate<br>101-68-8 | TWA: 0.005 ppm | (vacated) Ceiling: 0.02 ppm regulated under Methylene bisphenyl isocyanate<br>(vacated) Ceiling: 0.2 mg/m³ regulated under Methylene bisphenyl isocyanate<br>Ceiling: 0.02 ppm<br>Ceiling: 0.2 mg/m³ | IDLH: 75 mg/m³<br>Ceiling: 0.020 ppm 10 min<br>Ceiling: 0.2 mg/m³ 10 min<br>TWA: 0.005 ppm<br>TWA: 0.05 mg/m³ |
| Carbon black<br>1333-86-4 | TWA: 3 mg/m³ inhalable particulate matter | TWA: 3.5 mg/m³<br>(vacated) TWA: 3.5 mg/m³ | IDLH: 1750 mg/m³<br>TWA: 3.5 mg/m³<br>TWA: 0.1 mg/m³ Carbon black in presence of Polycyclic aromatic hydrocarbons PAH |
| Dibutyltin dilaurate<br>77-58-7 | TWA: 0.1 mg/m³ Sn<br>STEL: 0.2 mg/m³ Sn<br>pSk | TWA: 0.1 mg/m³ Sn<br>(vacated) TWA: 0.1 mg/m³ Sn<br>(vacated) S* | IDLH: 25 mg/m³ Sn<br>TWA: 0.1 mg/m³ except Cyhexatin Sn |

| Chemical name | Argentina | Brazil | S.D. 594/1999 | Colombia |
|---|---|---|---|---|
| Limestone<br>1317-65-3 | TWA-CMP: 10 mg/m³; | - | TWA-LPP: 7 mg/m³;free of Asbestos with <1% free Crystalline Silica<br>TWA-LPP:<br>5 mg/m³;respirable fraction | - |
| 4,4'-Methylenediphenyl diisocyanate<br>101-68-8 | TWA-CMP: 0.005 ppm; | TWA-LT: 0.005 ppm; | TWA-LPP: 0.004 ppm;<br>TWA-LPP: 0.05 mg/m³; | TWA: 0.005ppm |

| | | | | |
|---|---|---|---|---|
| Carbon black<br>1333-86-4 | TWA-CMP: 3.5 mg/m³;<br> | TWA-LT: 3.5 mg/m³;<br>inhalable particulate matter | - | TWA: 3mg/m³ |
| Dibutyltin dilaurate<br>77-58-7 | TWA-CMP: 0.1 mg/m³;<br>STEL (CMP-CPT): 0.2 mg/m³;<br>Sk | TWA-LT: 0.1 mg/m³;<br>STEL: 0.2 mg/m³; | TWA-LPP: 0.09 mg/m³;<br>STEL-LPT: 0.2 mg/m³;<br>pSd | STEL: 0.2mg/m³<br>TWA: 0.1mg/m³ |

| Chemical name | Costa Rica | Peru | Uruguay | Venezuela |
|---|---|---|---|---|
| 4,4'-Methylenediphenyl diisocyanate<br>101-68-8 | TWA: 0.005ppm | TWA: 0.005ppm<br>TWA: 0.051mg/m³ | 0.005 ppm TWA (listed under Methylene bisphenyl isocyanate (MDI)) | TWA: 0.005 ppm |
| Carbon black<br>1333-86-4 | TWA: 3mg/m³ | TWA: 3.5mg/m³ | 3 mg/m³ TWA (inhalable particulate matter) | TWA: 3.5 mg/m³ |
| Dibutyltin dilaurate<br>77-58-7 | STEL: 0.2mg/m³ | STEL: 0.2mg/m³<br>TWA: 0.1mg/m³ | 0.2 mg/m³ STEL (as Sn)<br>0.1 mg/m³ TWA (as Sn) | Skin<br>STEL: 0.2 mg/m³<br>TWA: 0.1 mg/m³ |

**8.2. Exposure controls**

**Appropriate engineering controls**

**Engineering controls** Showers
Eyewash stations
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles). Avoid contact with eyes.

**Hand protection** Wear suitable chemical resistant gloves. The selection of suitable gloves does not only depend on the material, but also on further marks of quality and various manufacturers.

**Skin and body protection** Wear suitable protective clothing.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General hygiene considerations** Wear suitable gloves and eye/face protection. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Regular cleaning of equipment, work area and clothing is recommended.

## 9. Physical and Chemical Properties

**9.1. Information on basic physical and chemical properties**

| | |
|---|---|
| **Physical state** | Liquid |
| **Appearance** | Paste |
| **Color** | Brown |
| **Odor** | No information available |
| **Odor threshold** | No information available |

| **Property** | **Values** | **Remarks • Method** |
|---|---|---|
| **pH** | No data available | None known |
| **pH (as aqueous solution)** | No data available | None known |
| **Melting point / freezing point** | No data available | None known |
| **Initial boiling point and boiling range** | No data available | None known |
| **Flash point** | > 93.3 °C / 199.94 °F | |
| **Evaporation rate** | No data available | None known |
| **Flammability** | No data available | None known |
| **Flammability Limit in Air** | | None known |
| **Upper flammability or explosive limits** | No data available | |
| **Lower flammability or explosive limits** | No data available | |
| **Vapor pressure** | No data available | None known |
| **Relative vapor density** | No data available | None known |
| **Relative density** | No data available | None known |
| **Water solubility** | No data available | None known |
| **Solubility(ies)** | No data available | None known |
| **Partition coefficient** | No data available | None known |
| **Autoignition temperature** | No data available | None known |
| **Decomposition temperature** | No data available | None known |
| **Kinematic viscosity** | No data available | None known |
| **Dynamic viscosity** | No data available | None known |

**9.2. Other information**

| | |
|---|---|
| **Explosive properties** | No information available |
| **Oxidizing properties** | No information available |
| **Solvent content (%)** | No information available |
| **Solid content (%)** | 96.3 |
| **Softening point** | No information available |
| **Molecular weight** | No information available |
| **VOC content** | No information available |
| **Density** | 1.712 g/cm³ |
| **Bulk density** | No information available |

## 10. Stability and Reactivity

**10.1. Reactivity**

**Reactivity** No information available.

**10.2. Chemical stability**

**Chemical stability** Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

**Possibility of hazardous reactions** None under normal processing.

**Hazardous polymerization** Hazardous polymerization may occur.

**10.4. Conditions to avoid**

**Conditions to avoid** Protect from moisture.

**10.5. Incompatible materials**

**Incompatible materials** None known based on information supplied.

**10.6. Hazardous decomposition products**

**Hazardous decomposition products** Carbon monoxide Carbon dioxide (CO2) Nitrogen oxides (NOx) Hydrogen cyanide Thermal decomposition can lead to release of irritating and toxic gases and vapors

## 11. Toxicological information

**11.1. Information on toxicological effects**

**Product Information**

**Inhalation** May cause sensitization in susceptible persons.

**Eye contact** Based on available data, the classification criteria are not met.

**Skin contact** Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. May cause sensitization by skin contact. Causes mild skin irritation.

**Ingestion** May cause additional affects as listed under "Inhalation".

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. Coughing and/ or wheezing. Itching. Rashes. Hives. Prolonged contact may cause redness and irritation.

**Acute toxicity**
**Numerical measures of toxicity**

**The following values are calculated based on chapter 3.1 of the GHS document**

| | |
|---|---|
| **ATEmix (oral)** | >5000 mg/kg |
| **ATEmix (dermal)** | 124,506.20 mg/kg |
| **ATEmix (inhalation-gas)** | >20000 ppm |
| **ATEmix (inhalation-dust/mist)** | 26.50 mg/l |
| **ATEmix (inhalation-vapor)** | >20 mg/l |

**Component Information**

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Limestone<br>1317-65-3 | >5000 mg/kg (Rattus) | - | - |
| 4,4'-Methylenediphenyl diisocyanate<br>101-68-8 | =31600 mg/kg (Rattus)<br>= 9200 mg/kg (Rattus) | LD 50 > 9400 mg/kg (Oryctolagus cuniculus)<br>OECD 402 | 1.5 mg/L (Rattus) 4 h |
| o-(p-isocyanatobenzyl)phenyl isocyanate | LD50 >2000 mg/Kg (Rattus) | LD 50 > 9400 mg/kg (Oryctolagus cuniculus) | 1.5 mg/L (4h) Rat |

| | | | |
|---|---|---|---|
| 5873-54-1 | | OECD 402 | |
| Propylene carbonate<br>108-32-7 | LD50 > 5000 mg/kg (Rattus) OECD 401 | > 3000 mg/kg (Oryctolagus cuniculus) | - |
| Carbon black<br>1333-86-4 | LD50 > 8000 mg/kg (Rattus) OECD 401 | > 3 g/kg (Oryctolagus cuniculus) | > 4.6046 mg/m$^3$ ( Rat ) 4 h |
| Benzene, 1,1'-methylenebis[4-isocyanato-, homopolymer, isobutyl alcohol-blocked<br>201615-11-4 | LD50 (Rat): Estimated > 2,500 mg/kg OECD 423 | LD50 (Rattus): > 2,000 mg/kg OECD 402 | ATE 1.5 mg/L |
| 4-isocyanatosulphonyltoluene tosyl isocyanate<br>4083-64-1 | =2234 mg/kg (Rattus) | LD 50 (Rattus) > 2000 mg/kg OECD 402 | >640 ppm (Rattus) 1 h |
| Dibutyltin dilaurate<br>77-58-7 | =2071 mg/kg (Rattus) OECD 401 | > 2000 mg/kg (Rattus) | - |

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** Classification based on data available for ingredients. Causes mild skin irritation.

o-(p-isocyanatobenzyl)phenyl isocyanate (5873-54-1)

| Method | Species | Exposure route | Effective dose | Exposure time | Results |
|---|---|---|---|---|---|
| OECD Test No. 404: Acute Dermal Irritation/Corrosion | Rabbit | | | | irritant |

Benzene, 1,1'-methylenebis[4-isocyanato-, homopolymer, isobutyl alcohol-blocked (201615-11-4)

| Method | Species | Exposure route | Effective dose | Exposure time | Results |
|---|---|---|---|---|---|
| OECD Test No. 404: Acute Dermal Irritation/Corrosion | Rabbit | Dermal | | | May cause transient irritation |

**Serious eye damage/eye irritation** Based on available data, the classification criteria are not met.

4,4'-Methylenediphenyl diisocyanate (101-68-8)

| Method | Species | Exposure route | Effective dose | Exposure time | Results |
|---|---|---|---|---|---|
| OECD Test No. 405: Acute Eye Irritation/Corrosion | Rabbit | Eye | 0.1 mL | 24 hours | Non-irritant |

Benzene, 1,1'-methylenebis[4-isocyanato-, homopolymer, isobutyl alcohol-blocked (201615-11-4)

| Method | Species | Exposure route | Effective dose | Exposure time | Results |
|---|---|---|---|---|---|
| OECD Test No. 405: Acute Eye Irritation/Corrosion | Rabbit | eye | | | May cause transient irritation |

**Respiratory or skin sensitization** May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

**Germ cell mutagenicity** Based on available data, the classification criteria are not met.

Benzene, 1,1'-methylenebis[4-isocyanato-, homopolymer, isobutyl alcohol-blocked (201615-11-4)

| Method | Species | Results |
|---|---|---|
| OECD Test No. 471: Bacterial Reverse Mutation Test | Hamster, in vitro | Not mutagenic in AMES Test |
| OECD Test No. 475: Mammalian Bone Marrow Chromosome Aberration Test | Mouse, in vivo | Not mutagenic |

**Carcinogenicity** This product contains substances which in their raw state are powder form, however in this product they are in a non-respirable form. Inhalation of powder/dust particles is unlikely to occur from exposure to this product.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name | ACGIH | IARC | NTP | OSHA |
|---|---|---|---|---|
| 4,4'-Methylenediphenyl diisocyanate 101-68-8 | - | Group 3 | - | - |
| Carbon black 1333-86-4 | A3 A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans | Group 2B | - | X |
| Dibutyltin dilaurate 77-58-7 | A4 - Not Classifiable as a Human Carcinogen | - | - | - |

**Legend**
**ACGIH (American Conference of Governmental Industrial Hygienists)**
*A3 - Animal Carcinogen*
*A4 - Not classifiable as a human carcinogen*
**IARC (International Agency for Research on Cancer)**
*Group 2B - Possibly Carcinogenic to Humans*
*Group 3 - Not Classifiable as to Carcinogenicity in Humans*
**Occupational Safety and Health Administration of the US Department of Labor**
*X - Present*

4,4'-Methylenediphenyl diisocyanate (101-68-8)

| Method | Species | Results |
|---|---|---|
| OECD Test No. 453: Combined Chronic Toxicity/Carcinogenicity Studies | Rat | Limited evidence of a carcinogenic effect |

o-(p-isocyanatobenzyl)phenyl isocyanate (5873-54-1)

| Method | Species | Results |
|---|---|---|
| OECD Test No. 453: Combined Chronic Toxicity/Carcinogenicity Studies | Rat | Carcinogenic |

**Reproductive toxicity** Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. May damage fertility or the unborn child.

**STOT - single exposure** Based on available data, the classification criteria are not met.

**STOT - repeated exposure** May cause damage to organs through prolonged or repeated exposure.

**Target organ effects** Respiratory system, Eyes, Skin.

**Aspiration hazard** Based on available data, the classification criteria are not met.

**Other adverse effects** No information available.

**Interactive effects** No information available.

## 12. Ecological information

## 12.1. Toxicity

**Ecotoxicity**

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---|---|---|---|---|
| Limestone 1317-65-3 | CE50 (72h) >200mg/L Algae (Desmondesmus subspicatus) | CL50 (96h)>10000mg/L (Oncorhynchus mykiss) | - | CE50 (48h) >1000 mg/L Daphnia Magna |
| 4,4'-Methylenediphenyl diisocyanate 101-68-8 | ErC50 (72h) >1640 mg/L Algae (scenedesmus subspicatus) (OECD 201) | >1000 mg/l Danio rerio | - | EC50 (24H) >1000 mg/L Daphnia magna |
| o-(p-isocyanatobenzyl)phenyl isocyanate 5873-54-1 | ErC50 (72h) >1640 mg/L Algae (scenedesmus subspicatus) (OECD 201) | LC50 (96 h) > 1000 mg/l Danio rerio (OECD 203) | - | EC50 (24H) >1000 mg/L Daphnia magna |
| Propylene carbonate 108-32-7 | ErC50 (72h): > 900mg/L (Desmodesmus subspicatus, OECD-201) | LC50 (96) h > 1000 mg/L (Cyprinus carpio, 67/548/EWG, Annex V, C.1.) | EC50 > 10000 mg/L 17 h | EC50 (48h): > 1000mg/L (Daphnia magna, OECD 202) |
| Carbon black 1333-86-4 | >10000 mg/l (Desmodesmus subspicatus) OECD 202 | >1000 mg/l (Brachydanio rerio) OCDE 203 | - | EC50: >5600mg/L (24h, Daphnia magna) |
| Benzene, 1,1'-methylenebis[4-isocyanato-, homopolymer, isobutyl alcohol-blocked 201615-11-4 | EC50 72hr : > 1,000 mg/l (Desmodesmus subspicatus (green algae)) OECD 201 | LC0 96hr : > 100 mg/l (Danio rerio (zebra fish)) OECD 203 | - | EC0 48hr : > 100 mg/l(Daphnia magna (Water flea)) OECD 202 |
| Dibutyltin dilaurate 77-58-7 | EC50 1 (72h) mg/L (desmodesmus subspicatus) | LC50: =2mg/L (48h, Oryzias latipes) | - | 0,463 (48h) mg/L (daphnia magma) |

## 12.2. Persistence and degradability

**Persistence and degradability** No information available.

## 12.3. Bioaccumulative potential

**Bioaccumulation** There is no data for this product.

**Component Information**

| Chemical name | Partition coefficient |
|---|---|
| Limestone 1317-65-3 | 0.9 |
| 4,4'-Methylenediphenyl diisocyanate 101-68-8 | 4.51 |
| Propylene carbonate 108-32-7 | -0.41 |
| 4-isocyanatosulphonyltoluene tosyl isocyanate 4083-64-1 | 0.6 |
| Dibutyltin dilaurate 77-58-7 | 4.44 |

## 12.4. Mobility in soil

**Mobility** No information available.

**Other adverse effects**

**Other adverse effects** No information available.

## 13. Disposal considerations

**13.1. Waste treatment methods**

**Waste from residues/unused products** It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

**Contaminated packaging** Dispose of in accordance with federal, state and local regulations.

## 14. Transport information

**DOT** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

## 15. Regulatory Information

**International Inventories**

| | |
|---|---|
| **TSCA** | Complies |
| **DSL** | Complies |

**Legend:**
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
**DSL** - Canadian Domestic Substances List
**Complies** - The components of this product are either listed or exempt from listing on inventory. Active
**Not Listed** - One or more components of this product are not listed on inventory.

**US Federal Regulations**

**SARA 313**
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

| Chemical name | CAS No. | SARA 313 - Threshold Values % |
|---|---|---|
| 4,4'-Methylenediphenyl diisocyanate | 101-68-8 | 1.0 |
| o-(p-isocyanatobenzyl)phenyl isocyanate | 5873-54-1 | 1.0 |

**SARA 311/312 Hazard Categories**
Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

## 16. Other Information

**Key or legend to abbreviations and acronyms used in the safety data sheet**

**Legend**
SVHC: Substances of Very High Concern for Authorization:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
STOT: Specific Target Organ Toxicity
ATE: Acute Toxicity Estimate
LC50: 50% Lethal Concentration
LD50: 50% Lethal Dose

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

| | | | |
|---|---|---|---|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | Sk* | Skin designation |

**Prepared By** Product Stewardship and Regulatory Affairs.

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**End of Safety Data Sheet**