# Safety Data Sheet



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| **Document group:** | 19-0314-5 | **Version number:** | 5.00 |
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This Safety Data Sheet has been prepared in accordance with the Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (Safe Work Australia, December 2011)

## SECTION 1: Identification

### 1.1. Product identifier

3M™ Scotchcast™ Plus Enhancing Performance Casting Tape (Standard Colors)

**Product Identification Numbers**

| | | | | |
|---|---|---|---|---|
| YP-2060-0001-7 | YP-2060-0002-5 | YP-2060-0003-3 | YP-2060-0004-1 | YP-2060-0006-6 |
| YP-2060-0009-0 | YP-2060-0014-0 | YP-2060-0015-7 | YP-2060-0016-5 | YP-2060-0017-3 |
| YP-2060-0019-9 | YP-2060-0021-5 | YP-2060-0022-3 | YP-2060-0027-2 | YP-2060-0028-0 |
| YP-2060-0029-8 | YP-2060-0032-2 | YP-2060-0034-8 | YP-2060-0035-5 | YP-2060-0040-5 |

### 1.2. Recommended use and restrictions on use

**Recommended use**

Immobilisation of upper and lower extremities

For Professional use only.

### 1.3. Supplier's details

**Address:** 3M Australia - Building A, 1 Rivett Road, North Ryde NSW 2113
**Telephone:** 136 136
**E Mail:** productinfo.au@mmm.com
**Website:** www.3m.com.au

### 1.4. Emergency telephone number

EMERGENCY: 1800 097 146 (Australia only)

## SECTION 2: Hazard identification

This product is classified as a hazardous chemical according to the Model Work Health and Safety Regulations, 2011, in accordance with applicable State and Territory legislation.

Refer to Section 14 of this Safety Data Sheets for product Dangerous Goods Classification.

### 2.1. Classification of the substance or mixture

Respiratory Sensitizer: Category 1.
Skin Sensitizer: Category 1.

Specific Target Organ Toxicity (repeated exposure): Category 2.

**2.2. Label elements**
The label elements below were prepared in accordance with the Code of Practice on Preparation of Safety Data Sheets for Hazardous Chemicals (Safe Work Australia, December 2011). This information may be different from the actual product label.

**Signal word**
Danger

**Symbols**
Health Hazard |

**Pictograms**

**Hazard statements**

| | |
|---|---|
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H317 | May cause an allergic skin reaction. |
| H373 | May cause damage to organs through prolonged or repeated exposure: respiratory system. |

**Precautionary statements**

**Prevention:**

| | |
|---|---|
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P284 | Wear respiratory protection. |

**Response:**

| | |
|---|---|
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P304 + P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P314 | Get medical advice/attention if you feel unwell. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P342 + P311 | If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician. |
| P362 + P364 | Take off contaminated clothing and wash it before reuse. |

**Disposal:**

| | |
|---|---|
| P501 | Dispose of contents/container in accordance with applicable local/regional/national/international regulations. |

**2.3. Other assigned/identified product hazards**
Persons previously sensitised to isocyanates may develop a cross-sensitisation reaction to other isocyanates.

**2.4. Other hazards which do not result in classification**
May be harmful if swallowed.
Causes mild skin irritation.

## SECTION 3: Composition/information on ingredients

This material is a mixture.

| Ingredient | CAS Nbr | % by Weight |
|---|---|---|
| Glass Yarn | 65997-17-3 | 40 - 70 |
| 4,4'-Diphenylmethane Diisocyanate-Polypropylene Glycol Polymer | 9048-57-1 | 15 - 40 |
| 1,1'-Methylenebis(Isocyanatobenzene) | 26447-40-5 | 3 - 6 |
| Wollastonite | 13983-17-0 | 1 - 5 |
| 2,6-Di-Tert-Butyl-P-Cresol | 128-37-0 | 0.1 - 1 |
| P-Toluenesulfonyl Chloride | 98-59-9 | 0.01 - 0.05 |

## SECTION 4: First aid measures

**4.1. Description of first aid measures**

**Inhalation**
Remove person to fresh air. If you feel unwell, get medical attention.

**Skin contact**
Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

**Eye contact**
Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

**If swallowed**
Rinse mouth. If you feel unwell, get medical attention.

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

Allergic respiratory reaction (difficulty breathing, wheezing, cough, and tightness of chest). Allergic skin reaction (redness, swelling, blistering, and itching). Target organ effects following prolonged or repeated exposure. See Section 11 for additional details.

**4.3. Indication of any immediate medical attention and special treatment required**
Not applicable

## SECTION 5: Fire-fighting measures

**5.1. Suitable extinguishing media**
In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

**5.2. Special hazards arising from the substance or mixture**
None inherent in this product.

**Hazardous Decomposition or By-Products**

| Substance | Condition |
|---|---|
| Carbon monoxide. | During combustion. |
| Carbon dioxide. | During combustion. |
| Hydrogen cyanide. | During combustion. |
| Oxides of nitrogen. | During combustion. |

**5.3. Special protective actions for fire-fighters**
No special protective actions for fire-fighters are anticipated.

# SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**
Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

**6.2. Environmental precautions**
Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up**
Collect as much of the spilled material as possible. Place in a container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. Clean up residue. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

# SECTION 7: Handling and storage

**7.1. Precautions for safe handling**
For industrial/occupational use only. Not for consumer sale or use. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

**7.2. Conditions for safe storage including any incompatibilities**
Keep container tightly closed. Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from strong bases. Store away from oxidising agents. Store away from amines.

# SECTION 8: Exposure controls/personal protection

**8.1 Control parameters**

**Occupational exposure limits**
If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

| Ingredient | CAS Nbr | Agency | Limit type | Additional comments |
|---|---|---|---|---|
| 2,6-Di-Tert-Butyl-P-Cresol | 128-37-0 | ACGIH | TWA(inhalable fraction and vapour):2 mg/m3 | A4: Not class. as human carcin |
| 2,6-Di-Tert-Butyl-P-Cresol | 128-37-0 | Australia OELs | TWA(8 hours):10 mg/m3 | |
| Wollastonite | 13983-17-0 | ACGIH | TWA(inhalable fraction):1 mg/m3 | A4: Not class. as human carcin |
| Free isocyanates | 26447-40-5 | Australia OELs | TWA(as NCO)(8 hours):0.02 mg/m3;STEL(as NCO)(15 minutes):0.07 mg/m3 | |
| CERAMIC FIBERS | 65997-17-3 | ACGIH | TWA(as fiber):0.2 fiber/cc | A2: Suspected human carcin. |
| CERAMIC FIBERS | 65997-17-3 | Australia OELs | TWA(as fiber)(8 hours):0.5 fibers/ml | |
| CONTINUOUS FILAMENT GLASS FIBERS | 65997-17-3 | ACGIH | TWA(as fiber):1 fiber/cc | A4: Not class. as human carcin |
| CONTINUOUS FILAMENT GLASS FIBERS, INHALABLE FRACTION | 65997-17-3 | ACGIH | TWA(inhalable fraction):5 mg/m3 | A4: Not class. as human carcin |
| Glass filaments | 65997-17-3 | Australia OELs | TWA(as fiber)(8 hours):0.5 | |

| | | | | |
|---|---|---|---|---|
| | | | fibers/ml;TWA(8 hours):0.5 fibers/ml | |
| GLASS WOOL FIBERS | 65997-17-3 | ACGIH | TWA(as fiber):1 fiber/cc | A3: Confirmed animal carcinogen. |
| Glass Yarn | 65997-17-3 | Manufacturer determined | TWA(as non-fibrous, respirable)(8 hours):3 mg/m3;TWA(as non-fibrous, inhalable fraction)(8 hours):10 mg/m3 | |
| ROCK WOOL FIBERS | 65997-17-3 | ACGIH | TWA(as fiber):1 fiber/cc | A3: Confirmed animal carcinogen. |
| SLAG WOOL FIBERS | 65997-17-3 | ACGIH | TWA(as fiber):1 fiber/cc | A3: Confirmed animal carcinogen. |
| SPECIAL PURPOSE GLASS FIBERS | 65997-17-3 | ACGIH | TWA(as fiber):1 fiber/cc | A3: Confirmed animal carcinogen. |
| P-Toluenesulfonyl Chloride | 98-59-9 | AIHA | CEIL:5 mg/m3 | |

ACGIH : American Conference of Governmental Industrial Hygienists
AIHA : American Industrial Hygiene Association
Australia OELs : Australia. Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment
CMRG : Chemical Manufacturer's Recommended Guidelines
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling
Sen: Sensitiser
Sk: Absorption through the skin may be a significant source of exposure.

**8.2. Exposure controls**

**8.2.1. Engineering controls**
Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

**8.2.2. Personal protective equipment (PPE)**

**Eye/face protection**

Eye protection not required.

**Skin/hand protection**
Gloves providing sufficient protection must be worn while applying the casting tape. E.g. nitrile gloves with a minimum thickness of 0.127 mm (5 mil, 0.005 inch) have proven to provide effective protection. The cast surface should be free of monomer and polymer isocyanate within 30 minutes when proper wetting techniques are used.

**Respiratory protection**

Results from air sampling during simulated product application show that vapours of methylenediphenyl-diisocyanate as used in the product are not detectable during use in Health Care facility cast rooms. Detection limits were extremely low and far below international safety recommendations for working with isocyanates. Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection. People with bronchial problems or with isocyanate sensitivity may still respond to low isocyanate concentrations. In general it is recommended to use synthetic casting material in rooms with normal general/dilution ventilation.

# SECTION 9: Physical and chemical properties

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

| | |
|---|---|
| **Physical state** | Solid. |

| | |
|---|---|
| **Specific Physical Form:** | Roll of Tape. (Fiberglass knitted tape impregnated with moisture curable polyurethane prepolymer resin) |
| **Colour** | Clear White |
| **Odour** | Slight Urethane |
| **Odour threshold** | *No data available.* |
| **pH** | *No data available.* |
| **Melting point/Freezing point** | *No data available.* |
| **Boiling point/Initial boiling point/Boiling range** | *No data available.* |
| **Flash point** | No flash point |
| **Evaporation rate** | Negligible |
| **Flammability (solid, gas)** | Not classified |
| **Flammable Limits(LEL)** | *No data available.* |
| **Flammable Limits(UEL)** | *No data available.* |
| **Vapor Density and/or Relative Vapor Density** | *No data available.* |
| **Density** | 1.1 g/ml |
| **Relative density** | 1.1 [*Ref Std:*WATER=1] [*Details:*g/cm3] |
| **Water solubility** | Nil |
| **Solubility- non-water** | *No data available.* |
| **Partition coefficient: n-octanol/water** | *No data available.* |
| **Autoignition temperature** | *No data available.* |
| **Decomposition temperature** | *No data available.* |
| **Viscosity/Kinematic Viscosity** | 35,000 - 65,000 mPa-s [@ 23 ºC ] |
| **Volatile organic compounds (VOC)** | *No data available.* |
| **Percent volatile as Text** | Negligible |
| **VOC less H2O & exempt solvents** | *No data available.* |

**Nanoparticles**
This material does not contain nanoparticles.

## SECTION 10: Stability and reactivity

**10.1 Reactivity**
This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

**10.2 Chemical stability**
Stable.

**10.3. Conditions to avoid**
Avoid curing large quantities of material to prevent a premature reaction (exotherm) with production of intense heat and smoke.
Direct sunlight
Sparks and/or flames.

**10.4. Possibility of hazardous reactions**
Hazardous polymerisation will not occur.

**10.5 Incompatible materials**
Alcohols.
Amines.
Strong bases.
Strong oxidising agents.
Water

**10.6 Hazardous decomposition products**

| Substance | Condition |
|---|---|
| None known. | |

## SECTION 11: Toxicological information

**The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.**

**11.1 Information on Toxicological effects**

**Signs and Symptoms of Exposure**

**Based on test data and/or information on the components, this material may produce the following health effects:**

**Inhalation**
Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Allergic respiratory reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest. May cause additional health effects (see below).

**Skin contact**
Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

**Eye contact**
Contact with the eyes during product use is not expected to result in significant irritation.

**Ingestion**
May be harmful if swallowed.
Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea.

**Additional Health Effects:**

**Prolonged or repeated exposure may cause target organ effects:**
Respiratory effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish coloured skin (cyanosis), sputum production, changes in lung function tests, and respiratory failure.

**Additional information:**
Persons previously sensitised to isocyanates may develop a cross-sensitisation reaction to other isocyanates. Results from air sampling for simulated dry and wet product application show that vapours of methylenediphenyl-diisocyanate as used in the product are not detectable during use. Detection limits were extremely low and far below international safety recommendations for working with isocyanates. People with bronchial problems or with isocyanate sensitivity may still respond to low isocyanate concentrations.

Direct contact with the cast surface without the use of gloves should be avoided until curing has completed. The cast surface should be free of monomer and polymer isocyanate within 30 minutes when proper wetting techniques are used.

**Toxicological Data**
If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

**Acute Toxicity**

| Name | Route | Species | Value |
|---|---|---|---|

| | | | |
|---|---|---|---|
| Overall product | Ingestion | | No data available; calculated ATE >2,000 - =5,000 mg/kg |
| Glass Yarn | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Glass Yarn | Ingestion | | LD50 estimated to be 2,000 - 5,000 mg/kg |
| 4,4'-Diphenylmethane Diisocyanate-Polypropylene Glycol Polymer | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| 4,4'-Diphenylmethane Diisocyanate-Polypropylene Glycol Polymer | Ingestion | | LD50 estimated to be 2,000 - 5,000 mg/kg |
| 1,1'-Methylenebis(Isocyanatobenzene) | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| 1,1'-Methylenebis(Isocyanatobenzene) | Inhalation-Dust/Mist (4 hours) | Rat | LC50 0.368 mg/l |
| 1,1'-Methylenebis(Isocyanatobenzene) | Ingestion | Rat | LD50 31,600 mg/kg |
| Wollastonite | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Wollastonite | Ingestion | | LD50 estimated to be 2,000 - 5,000 mg/kg |
| 2,6-Di-Tert-Butyl-P-Cresol | Dermal | Rat | LD50 > 2,000 mg/kg |
| 2,6-Di-Tert-Butyl-P-Cresol | Ingestion | Rat | LD50 > 2,930 mg/kg |
| P-Toluenesulfonyl Chloride | Dermal | Rabbit | LD50 estimated to be > 5,000 mg/kg |
| P-Toluenesulfonyl Chloride | Ingestion | Rat | LD50 > 5,000 mg/kg |

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

| Name | Species | Value |
|---|---|---|
| Glass Yarn | Professional judgement | No significant irritation |
| 1,1'-Methylenebis(Isocyanatobenzene) | official classification | Irritant |
| 2,6-Di-Tert-Butyl-P-Cresol | Human and animal | Minimal irritation |
| P-Toluenesulfonyl Chloride | Rabbit | Irritant |

**Serious Eye Damage/Irritation**

| Name | Species | Value |
|---|---|---|
| Glass Yarn | Professional judgement | No significant irritation |
| 1,1'-Methylenebis(Isocyanatobenzene) | official classification | Severe irritant |
| 2,6-Di-Tert-Butyl-P-Cresol | Rabbit | Mild irritant |
| P-Toluenesulfonyl Chloride | Rabbit | Corrosive |

**Skin Sensitisation**

| Name | Species | Value |
|---|---|---|
| 1,1'-Methylenebis(Isocyanatobenzene) | official classification | Sensitising |
| 2,6-Di-Tert-Butyl-P-Cresol | Human | Not classified |
| P-Toluenesulfonyl Chloride | Mouse | Sensitising |

**Respiratory Sensitisation**

| Name | Species | Value |
|---|---|---|
| 1,1'-Methylenebis(Isocyanatobenzene) | Human | Sensitising |

**Germ Cell Mutagenicity**

| Name | Route | Value |
|---|---|---|
| Glass Yarn | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| 1,1'-Methylenebis(Isocyanatobenzene) | In Vitro | Some positive data exist, but the data are not |

| | | |
|---|---|---|
| | | sufficient for classification |
| Wollastonite | In Vitro | Not mutagenic |
| 2,6-Di-Tert-Butyl-P-Cresol | In Vitro | Not mutagenic |
| 2,6-Di-Tert-Butyl-P-Cresol | In vivo | Not mutagenic |
| P-Toluenesulfonyl Chloride | In vivo | Not mutagenic |
| P-Toluenesulfonyl Chloride | In Vitro | Some positive data exist, but the data are not sufficient for classification |

**Carcinogenicity**

| Name | Route | Species | Value |
|---|---|---|---|
| Glass Yarn | Inhalation | Multiple animal species | Some positive data exist, but the data are not sufficient for classification |
| 1,1'-Methylenebis(Isocyanatobenzene) | Inhalation | Rat | Some positive data exist, but the data are not sufficient for classification |
| 2,6-Di-Tert-Butyl-P-Cresol | Ingestion | Multiple animal species | Some positive data exist, but the data are not sufficient for classification |

**Reproductive Toxicity**

**Reproductive and/or Developmental Effects**

| Name | Route | Value | Species | Test result | Exposure Duration |
|---|---|---|---|---|---|
| 1,1'-Methylenebis(Isocyanatobenzene) | Inhalation | Not classified for development | Rat | NOAEL 0.004 mg/l | during organogenesis |
| 2,6-Di-Tert-Butyl-P-Cresol | Ingestion | Not classified for female reproduction | Rat | NOAEL 500 mg/kg/day | 2 generation |
| 2,6-Di-Tert-Butyl-P-Cresol | Ingestion | Not classified for male reproduction | Rat | NOAEL 500 mg/kg/day | 2 generation |
| 2,6-Di-Tert-Butyl-P-Cresol | Ingestion | Not classified for development | Rat | NOAEL 100 mg/kg/day | 2 generation |
| P-Toluenesulfonyl Chloride | Ingestion | Not classified for female reproduction | Rat | NOAEL 750 mg/kg/day | premating into lactation |
| P-Toluenesulfonyl Chloride | Ingestion | Not classified for male reproduction | Rat | NOAEL 750 mg/kg/day | 34 days |
| P-Toluenesulfonyl Chloride | Ingestion | Not classified for development | Rat | NOAEL 750 mg/kg/day | premating into lactation |

**Target Organ(s)**

**Specific Target Organ Toxicity - single exposure**

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|---|---|---|---|---|---|---|
| 1,1'-Methylenebis(Isocyanatobenzene) | Inhalation | respiratory irritation | May cause respiratory irritation | official classification | NOAEL Not available | |
| P-Toluenesulfonyl Chloride | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Not available | |

**Specific Target Organ Toxicity - repeated exposure**

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|---|---|---|---|---|---|---|
| Glass Yarn | Inhalation | respiratory system | Not classified | Human | NOAEL not available | occupational exposure |
| 1,1'-Methylenebis( | Inhalation | respiratory system | Causes damage to organs through | Rat | LOAEL 0.004 mg/l | 13 weeks |

| | | | | | | |
|---|---|---|---|---|---|---|
| Isocyanatobenzene) | | | prolonged or repeated exposure | | | |
| Wollastonite | Inhalation | respiratory system | Not classified | Human | NOAEL Not available | occupational exposure |
| Wollastonite | Inhalation | pulmonary fibrosis | Not classified | Human and animal | NOAEL Not available | |
| 2,6-Di-Tert-Butyl-P-Cresol | Ingestion | liver | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 250 mg/kg/day | 28 days |
| 2,6-Di-Tert-Butyl-P-Cresol | Ingestion | kidney and/or bladder | Not classified | Rat | NOAEL 500 mg/kg/day | 2 generation |
| 2,6-Di-Tert-Butyl-P-Cresol | Ingestion | blood | Not classified | Rat | LOAEL 420 mg/kg/day | 40 days |
| 2,6-Di-Tert-Butyl-P-Cresol | Ingestion | endocrine system | Not classified | Rat | NOAEL 25 mg/kg/day | 2 generation |
| 2,6-Di-Tert-Butyl-P-Cresol | Ingestion | heart | Not classified | Mouse | NOAEL 3,480 mg/kg/day | 10 weeks |
| P-Toluenesulfonyl Chloride | Ingestion | gastrointestinal tract | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 750 mg/kg/day | 34 days |
| P-Toluenesulfonyl Chloride | Ingestion | heart \| endocrine system \| hematopoietic system \| nervous system \| kidney and/or bladder \| liver \| immune system \| respiratory system | Not classified | Rat | NOAEL 750 mg/kg/day | 34 days |

**Aspiration Hazard**
For the component/components, either no data are currently available or the data are not sufficient for classification.

**Exposure Levels**
Refer Section **8.1 Control Parameters** of this Safety Data Sheet.

**Interactive Effects**
Not determined.

## SECTION 12: Ecological information

**The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.**

**12.1. Toxicity**

**Acute aquatic hazard:**

Not acutely toxic to aquatic life by GHS criteria.

**Chronic aquatic hazard:**
Not chronically toxic to aquatic life by GHS criteria.

No product test data available.

| Material | CAS Number | Organism | Type | Exposure | Test endpoint | Test result |
|---|---|---|---|---|---|---|
| Glass Yarn | 65997-17-3 | Green algae | Experimental | 72 hours | EC50 | >1,000 mg/l |
| Glass Yarn | 65997-17-3 | Water flea | Experimental | 72 hours | EC50 | >1,000 mg/l |
| Glass Yarn | 65997-17-3 | Zebra Fish | Experimental | 96 hours | LC50 | >1,000 mg/l |
| Glass Yarn | 65997-17-3 | Green algae | Experimental | 72 hours | NOEC | >=1,000 mg/l |
| 4,4'-Diphenylmethane Diisocyanate-Polypropylene Glycol Polymer | 9048-57-1 | Water flea | Estimated | 24 hours | EC50 | >100 mg/l |
| 4,4'-Diphenylmethane Diisocyanate-Polypropylene Glycol Polymer | 9048-57-1 | Zebra Fish | Estimated | 24 hours | LC50 | >100 mg/l |
| 1,1'-Methylenebis(Isocyanatobenzene) | 26447-40-5 | Green algae | Analogous Compound | 72 hours | EC50 | >1,640 mg/l |
| 1,1'-Methylenebis(Isocyanatobenzene) | 26447-40-5 | Water flea | Analogous Compound | 24 hours | EC50 | >1,000 mg/l |
| 1,1'-Methylenebis(Isocyanatobenzene) | 26447-40-5 | Zebra Fish | Analogous Compound | 96 hours | LC50 | >1,000 mg/l |
| 1,1'-Methylenebis(Isocyanatobenzene) | 26447-40-5 | Green algae | Analogous Compound | 72 hours | NOEC | 1,640 mg/l |
| 1,1'-Methylenebis(Isocyanatobenzene) | 26447-40-5 | Water flea | Analogous Compound | 21 days | NOEC | 10 mg/l |
| 1,1'-Methylenebis(Isocyanatobenzene) | 26447-40-5 | Activated sludge | Analogous Compound | 3 hours | EC50 | >100 mg/l |
| 1,1'-Methylenebis(Isocyanatobenzene) | 26447-40-5 | Lettuce | Analogous Compound | 17 days | NOEC | 1,000 mg/kg (Dry Weight) |
| 1,1'-Methylenebis(Isocyanatobenze | 26447-40-5 | Redworm | Analogous Compound | 14 days | LC50 | >1,000 mg/kg (Dry Weight) |

| | | | | | | |
|---|---|---|---|---|---|---|
| ne) | | | | | | |
| Wollastonite | 13983-17-0 | | Data not available or insufficient for classification | | | N/A |
| 2,6-Di-Tert-Butyl-P-Cresol | 128-37-0 | Activated sludge | Experimental | 3 hours | EC50 | >10,000 mg/l |
| 2,6-Di-Tert-Butyl-P-Cresol | 128-37-0 | Green algae | Experimental | 72 hours | EC50 | >0.4 mg/l |
| 2,6-Di-Tert-Butyl-P-Cresol | 128-37-0 | Water flea | Experimental | 48 hours | EC50 | 0.48 mg/l |
| 2,6-Di-Tert-Butyl-P-Cresol | 128-37-0 | Zebra Fish | Experimental | 96 hours | No tox obs at lmt of water sol | >100 mg/l |
| 2,6-Di-Tert-Butyl-P-Cresol | 128-37-0 | Green algae | Experimental | 72 hours | EC10 | 0.4 mg/l |
| 2,6-Di-Tert-Butyl-P-Cresol | 128-37-0 | Medaka | Experimental | 42 days | NOEC | 0.053 mg/l |
| 2,6-Di-Tert-Butyl-P-Cresol | 128-37-0 | Water flea | Experimental | 21 days | NOEC | 0.023 mg/l |
| P-Toluenesulfonyl Chloride | 98-59-9 | Activated sludge | Estimated | 3 hours | EC10 | 240 mg/l |
| P-Toluenesulfonyl Chloride | 98-59-9 | Green algae | Experimental | 72 hours | EC50 | >100 mg/l |
| P-Toluenesulfonyl Chloride | 98-59-9 | Medaka | Experimental | 96 hours | LC50 | >100 mg/l |
| P-Toluenesulfonyl Chloride | 98-59-9 | Water flea | Experimental | 48 hours | EC50 | >334 mg/l |
| P-Toluenesulfonyl Chloride | 98-59-9 | Green Algae | Experimental | 72 hours | NOEC | 2.6 mg/l |

**12.2. Persistence and degradability**

| Material | CAS Number | Test type | Duration | Study Type | Test result | Protocol |
|---|---|---|---|---|---|---|
| Glass Yarn | 65997-17-3 | Data not available-insufficient | N/A | N/A | N/A | N/A |
| 4,4'-Diphenylmethane Diisocyanate-Polypropylene Glycol Polymer | 9048-57-1 | Data not available-insufficient | N/A | N/A | N/A | N/A |
| 1,1'-Methylenebis(Isocyanatobenzene) | 26447-40-5 | Analogous Compound Hydrolysis | | Hydrolytic half-life (pH 7) | <2 hours (t 1/2) | |
| 1,1'-Methylenebis(Isocyanatobenze | 26447-40-5 | Analogous Compound Biodegradation | 28 days | BOD | 0 % BOD/ThOD | OECD 301C - MITI test (I) |

| | | | | | | |
|---|---|---|---|---|---|---|
| ne) | | | | | | |
| 1,1'-Methylenebis(Isocyanatobenzene) | 26447-40-5 | Analogous Compound Aquatic Inherent Biodegrad. | 28 days | BOD | 0 % BOD/ThOD | OECD 302C - Modified MITI (II) |
| Wollastonite | 13983-17-0 | Data not available-insufficient | N/A | N/A | N/A | N/A |
| 2,6-Di-Tert-Butyl-P-Cresol | 128-37-0 | Data not available-insufficient | N/A | N/A | N/A | N/A |
| P-Toluenesulfonyl Chloride | 98-59-9 | Experimental Hydrolysis | | Hydrolytic half-life | 2.2 minutes (t 1/2) | Non-standard method |
| P-Toluenesulfonyl Chloride | 98-59-9 | Experimental Biodegradation | 28 days | BOD | 60 % BOD/ThOD | OECD 301D - Closed bottle test |

**12.3 : Bioaccumulative potential**

| Material | CAS Number | Test type | Duration | Study Type | Test result | Protocol |
|---|---|---|---|---|---|---|
| Glass Yarn | 65997-17-3 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| 4,4'-Diphenylmethane Diisocyanate-Polypropylene Glycol Polymer | 9048-57-1 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| 1,1'-Methylenebis(Isocyanatobenzene) | 26447-40-5 | Analogous Compound BCF - Carp | 28 days | Bioaccumulation factor | 200 | OECD305-Bioconcentration |
| 1,1'-Methylenebis(Isocyanatobenzene) | 26447-40-5 | Analogous Compound Bioconcentration | | Log Kow | 4.51 | OECD 117 log Kow HPLC method |
| Wollastonite | 13983-17-0 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| 2,6-Di-Tert-Butyl-P-Cresol | 128-37-0 | Experimental BCF - Carp | 56 days | Bioaccumulation factor | 1277 | OECD 305E - Bioaccumulation flow-through fish test |
| P-Toluenesulfonyl Chloride | 98-59-9 | Estimated Bioconcentration | | Log Kow | 0.93 | Non-standard method |

**12.4. Mobility in soil**
Please contact manufacturer for more details

**12.5 Other adverse effects**

No information available.

## SECTION 13: Disposal considerations

**13.1. Disposal methods**
Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. If no other disposal options are available, waste product that has been completely cured or polymerized may be placed in a landfill properly designed for industrial waste. During cleanup or disposal of open, uncured product, gloves providing sufficient protection must be worn. E.g. nitrile gloves with a minimum thickness of 0.127 mm (5 mil, 0.005 inch) have proven to provide effective protection. Additionally the following skin protection may be needed: laboratory coat or long-sleeve protective gauntlets.

## SECTION 14: Transport Information

**Australian Dangerous Goods Code (ADG) - Road/Rail Transport**
**UN No.:** Not applicable.
**Proper shipping name:** Not applicable.
**Class/Division:** Not applicable.
**Sub Risk:** Not applicable.
**Packing Group:** Not applicable.

**Hazchem Code:** Not applicable
**IERG:** Not applicable.

**International Air Transport Association (IATA) - Air Transport**
**UN No.:** Not applicable.
**Proper shipping name:** Not applicable.
**Class/Division:** Not applicable.
**Sub Risk:** Not applicable.
**Packing Group:** Not applicable.

**International Maritime Dangerous Goods Code (IMDG)- Marine Transport**
**UN No.:** Not applicable.
**Proper shipping name:** Not applicable.
**Class/Division:** Not applicable.
**Sub Risk:** Not applicable.
**Packing Group:** Not applicable.
**Marine Pollutant:** Not applicable.

## SECTION 15: Regulatory information

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Australian Inventory Status:**
This product is regulated by the Therapeutics Goods Administration and is exempt from compliance with the Industrial Chemicals (Notification and Assessment) Act 1989 as amended.

## SECTION 16: Other information

**Revision information:**
Complete document review.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Safety Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.
Greenguard ® is a United States based program. The 'Low VOC' reference related to United States Federal and State regulations exemptions for some solvents.

**3M Australia SDSs are available at www.3m.com.au**