



## Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the New Zealand, Hazardous Substances (Safety Data Sheets) Notice 2017.

### SECTION 1: Identification

#### 1.1. Product identifier

3M Scotchcast One-Step Splint

#### Product Identification Numbers

YP-2060-4000-5 YP-2060-4001-3 YP-2060-4004-7 YP-2060-4005-4 YP-2060-4006-2

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Splint for orthopedic use, Immobilization of upper and lower extremities

For Professional use only

#### 1.3. Supplier's details

**Address:** 3M New Zealand Ltd, 94 Apollo Drive, Rosedale 0632, Auckland  
**Telephone:** (09) 477 4040  
**E Mail:** innovation@nz.mmm.com  
**Website:** 3m.co.nz

#### 1.4. Emergency telephone number

24 hr Medical Emergency, National Poisons Centre, 0800 764 766 (0800 POISON)

### SECTION 2: Hazard identification

Classified as hazardous in accordance with the relevant criteria of the HSNO Act 1996, the Hazardous Substances (Classification) Notice 2017 and Hazardous Substances (Minimum Degrees of Hazard) Notice 2017. Refer to Section 14 of this Safety Data Sheet for product Dangerous Goods Classification.

#### 2.1. Classification of the substance or mixture

GHS	HSNO
Acute Toxicity (oral): Category 5	6.1E Acute toxicity (oral)
Serious Eye Damage/Irritation: Category 2	6.4A Irritating to the eye
Skin Corrosion/Irritation: Category 2	6.3A Irritating to the skin
Respiratory Sensitiser: Category 1	6.5A Respiratory sensitiser

## 3M Scotchcast One-Step Splint

Skin Sensitiser: Category 1	6.5B Skin sensitiser
Specific Target Organ Toxicity (repeated exposure): Category 1	6.9A Toxic to human target organs/systems
No GHS Equivalent	9.3B Terrestrial vertebrate toxicity

### 2.2. Label elements

#### SIGNAL WORD

DANGER!

#### Symbols:

Health Hazard | Environment |

#### Pictograms



#### HAZARD STATEMENTS:

H303	May be harmful if swallowed.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H372	Causes damage to organs through prolonged or repeated exposure: respiratory system
H432	Toxic to terrestrial vertebrates.

#### PRECAUTIONARY STATEMENTS

##### General:

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.

##### Prevention:

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280A	Wear eye/face protection.
P284A	In case of inadequate ventilation wear respiratory protection.
P280E	Wear protective gloves.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P264B	Wash exposed skin thoroughly after handling.
P272A	Contaminated work clothing must not be allowed out of the workplace.

##### Response:

P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical advice/attention.

### 3M Scotchcast One-Step Splint

P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P321	Specific treatment (see Notes to Physician on this label).
P312	Call a POISON CENTRE or doctor/physician if you feel unwell.
P314	Get medical advice/attention if you feel unwell.
P391	Collect spillage.

#### Disposal:

P501	Dispose of contents/container in accordance with applicable local/regional/national/international regulations.
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#### 2.3. Other hazards

Persons previously sensitised to isocyanates may develop a cross-sensitisation reaction to other isocyanates.

### SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	% by Weight
Glass, oxide, chemicals	65997-17-3	40 - 70
Diphenylmethane-4,4'-diisocyanate	101-68-8	7 - 13
1,1'-Methylenebis[isocyanatobenzene], homopolymer	39310-05-9	1 - 10
Polyurethane foam	9009-54-5	1 - 10
Polyether polyol	Trade Secret	1 - 10
(Z)-9-Octadecen-1-ol ethoxylated	9004-98-2	1 - 5
Oxirane, Polymer with Methyloxirane, ether with 1,2-Propanediol (2:1)	Trade Secret	1 - 5
Diphenylmethane-2,4'-diisocyanate	5873-54-1	0.5 - 2.5
Polyethylene terephthalate	25038-59-9	0.5 - 2.5
Wollastonite	13983-17-0	0.5 - 2.5
Fluorocarbon polymer	Trade Secret	0.5 - 2.5
Polyol-ether	Trade Secret	0.5 - 2.5
Acrylic Adhesive	Trade Secret	0.5 - 1.5
2,6-Di-tert-butyl-p-cresol	128-37-0	< 0.25

### 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

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

A product risk assessment is recommended to determine if eye wash facilities may be required when using this product in the workplace.

##### If swallowed

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

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

See Section 11.1 Information on toxicological effects

#### 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

<u>Substance</u>	<u>Condition</u>
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.

5.4. Hazchem code: Not applicable.

### 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

Refer to Section 15 - Controls for more information

#### 7.1. Precautions for safe handling

For industrial/occupational use only. Not for consumer sale or use. Do not breathe dust/fume/gas/mist/vapours/spray. 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

Store away from heat. Store away from strong bases. Store away from oxidising agents.

#### 7.3. Certified handler

Not required

## 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
Free isocyanates	101-68-8	New Zealand WES	TWA(as NCO)(8 hours):0.02 mg/m <sup>3</sup> ;STEL(as NCO)(15 minutes):0.07 mg/m <sup>3</sup>	Capable of csng resp/skin sens
Diphenylmethane-4,4'-diisocyanate	101-68-8	ACGIH	TWA:0.005 ppm	
2,6-Di-tert-butyl-p-cresol	128-37-0	ACGIH	TWA(inhalable fraction and vapor):2 mg/m <sup>3</sup>	A4: Not class. as human carcinogen
2,6-Di-tert-butyl-p-cresol	128-37-0	New Zealand WES	TWA(8 hours):10 mg/m <sup>3</sup>	
Free isocyanates	5873-54-1	New Zealand WES	TWA(as NCO)(8 hours):0.02 mg/m <sup>3</sup> ;STEL(as NCO)(15 minutes):0.07 mg/m <sup>3</sup>	Capable of csng resp/skin sens
Ceramic fibres	65997-17-3	ACGIH	TWA(as fiber):0.2 fiber/cc	A2: Suspected human carcin.
CONTINUOUS FILAMENT GLASS FIBERS	65997-17-3	ACGIH	TWA(as fiber):1 fiber/cc	A4: Not class. as human carcinogen
CONTINUOUS FILAMENT GLASS FIBERS, INHALABLE FRACTION	65997-17-3	ACGIH	TWA(inhalable fraction):5 mg/m <sup>3</sup>	A4: Not class. as human carcinogen
Glass filaments	65997-17-3	New Zealand WES	TWA(as inhalable dust)(8 hours):5 mg/m <sup>3</sup> ;TWA(as respirable dust)(8 hours):1 f/mL;TWA(Respirable fibers)(8 hours):1 f/mL	
GLASS WOOL FIBERS	65997-17-3	ACGIH	TWA(as fiber):1 fiber/cc	A3: Confirmed animal carcinogen.
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.

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

New Zealand WES : New Zealand Workplace Exposure Standards.

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

ppm: parts per million

mg/m<sup>3</sup>: milligrams per cubic metre

CELL: Ceiling

### 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

During cleanup or disposal of large amounts of product:

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Indirect vented goggles.

Refer AS/NZS 1336 - Recommended practices for occupational eye protection and for performance specifications AS/NZS 1337, Parts 1 - 6 - Personal eye-protection.

#### Skin/hand protection

For application specialists in Health Care facilities protective gloves are not necessary while applying the product. Care should be exercised not to contact unprotected, uncured areas of the product created by trimming or removal of the fabric or felt covering. Exposed surfaces should be free of monomer and polymer isocyanate within 30 minutes when proper wetting techniques are used.

#### Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure: 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.

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

Refer AS/NZS 1715 - Selection, use and maintenance of respiratory protective equipment and AS/NZS 1716 - Respiratory protective devices.

## SECTION 9: Physical and chemical properties

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

<b>Physical state</b>	Solid.
<b>Specific Physical Form:</b>	Fiberglass knitted backing tape impregnated with moisture curable polyurethane prepolymer resin and covered one side by foam and other by PET-nonwoven
<b>Appearance/Odour</b>	White/yellow colour; slight odour
<b>Odour threshold</b>	<i>No data available.</i>
<b>pH</b>	<i>Not applicable.</i>
<b>Melting point/Freezing point</b>	<i>No data available.</i>
<b>Boiling point/Initial boiling point/Boiling range</b>	<i>Not applicable.</i>
<b>Flash point</b>	<i>Not applicable.</i>
<b>Evaporation rate</b>	<i>Not applicable.</i>
<b>Flammability (solid, gas)</b>	Not classified
<b>Flammable Limits(LEL)</b>	<i>Not applicable.</i>

## 3M Scotchcast One-Step Splint

Flammable Limits(UEL)	<i>Not applicable.</i>
Vapour pressure	<i>Not applicable.</i>
Vapour density	<i>Not applicable.</i>
Density	<i>No data available.</i>
Relative density	<i>Not applicable.</i>
Water solubility	Nil
Solubility- non-water	<i>No data available.</i>
Partition coefficient: n-octanol/water	<i>No data available.</i>
Autoignition temperature	<i>No data available.</i>
Decomposition temperature	<i>No data available.</i>
Viscosity	35,000 - 65,000 mPa-s [ @ 23 °C ]
Volatile organic compounds (VOC)	<i>No data available.</i>
Percent volatile	<i>Not applicable.</i>
VOC less H2O & exempt solvents	<i>No data available.</i>

## 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 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

### 10.4 Conditions to avoid

Heat.

### 10.5 Incompatible materials

Alcohols.

Strong bases.

Strong oxidising agents.

### 10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to Section 5.2 for hazardous decomposition products during combustion.

## 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:

### 3M Scotchcast One-Step Splint

#### 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. Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, nose and throat pain. May cause additional health effects (see below).

#### Skin contact

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

#### Eye contact

Severe eye irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision. Dust created by cutting, grinding, sanding, or machining may cause eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

#### 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 ATE2,000 - 5,000 mg/kg
Glass, oxide, chemicals	Dermal		LD50 estimated to be > 5,000 mg/kg
Glass, oxide, chemicals	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Diphenylmethane-4,4'-diisocyanate	Dermal	Rabbit	LD50 > 5,000 mg/kg
Diphenylmethane-4,4'-diisocyanate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.368 mg/l
Diphenylmethane-4,4'-diisocyanate	Ingestion	Rat	LD50 31,600 mg/kg
1,1'-Methylenebis[isocyanatobenzene], homopolymer	Dermal	Rabbit	LD50 > 5,000 mg/kg
1,1'-Methylenebis[isocyanatobenzene], homopolymer	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.368 mg/l
1,1'-Methylenebis[isocyanatobenzene], homopolymer	Ingestion	Rat	LD50 31,600 mg/kg
(Z)-9-Octadecen-1-ol ethoxylated	Dermal		LD50 estimated to be > 5,000 mg/kg



### 3M Scotchcast One-Step Splint

(Z)-9-Octadecen-1-ol ethoxylated	Ingestion	Rat	LD50 estimated to be > 5,000 mg/kg
Polyol-ether	Dermal	Rat	LD50 > 2,000 mg/kg
Polyol-ether	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 50 mg/l
Polyol-ether	Ingestion	Rat	LD50 4,600 mg/kg
Polyethylene terephthalate	Dermal		LD50 estimated to be > 5,000 mg/kg
Polyethylene terephthalate	Ingestion	Rat	LD50 > 5,000 mg/kg
Diphenylmethane-2,4'-diisocyanate	Dermal	Rabbit	LD50 > 5,000 mg/kg
Diphenylmethane-2,4'-diisocyanate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.368 mg/l
Diphenylmethane-2,4'-diisocyanate	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
Fluorocarbon polymer	Dermal		LD50 estimated to be > 5,000 mg/kg
Fluorocarbon polymer	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

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

Name	Species	Value
Glass, oxide, chemicals	Professional judgement	No significant irritation
Diphenylmethane-4,4'-diisocyanate	official classification	Irritant
1,1'-Methylenebis[isocyanatobenzene], homopolymer	official classification	Irritant
(Z)-9-Octadecen-1-ol ethoxylated	Rabbit	Irritant
Polyol-ether	Rabbit	No significant irritation
Polyethylene terephthalate	In vitro data	No significant irritation
Diphenylmethane-2,4'-diisocyanate	official classification	Irritant
2,6-Di-tert-butyl-p-cresol	Human and animal	Minimal irritation

### Serious Eye Damage/Irritation

Name	Species	Value
Glass, oxide, chemicals	Professional judgement	No significant irritation
Diphenylmethane-4,4'-diisocyanate	official classification	Severe irritant
1,1'-Methylenebis[isocyanatobenzene], homopolymer	official classification	Severe irritant
(Z)-9-Octadecen-1-ol ethoxylated	Rabbit	Severe irritant
Polyol-ether	Rabbit	Mild irritant
Polyethylene terephthalate	Human	No significant irritation
Diphenylmethane-2,4'-diisocyanate	official classification	Severe irritant

**3M Scotchcast One-Step Splint**

2,6-Di-tert-butyl-p-cresol	Rabbit	Mild irritant
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**Skin Sensitisation**

Name	Species	Value
Overall product	Guinea pig	Not classified
Diphenylmethane-4,4'-diisocyanate	official classification	Sensitising
1,1'-Methylenebis[isocyanatobenzene], homopolymer	official classification	Sensitising
(Z)-9-Octadecen-1-ol ethoxylated	Human	Not classified
Polyethylene terephthalate	Human	Not classified
Diphenylmethane-2,4'-diisocyanate	official classification	Sensitising
2,6-Di-tert-butyl-p-cresol	Human	Not classified

**Respiratory Sensitisation**

Name	Species	Value
Diphenylmethane-4,4'-diisocyanate	Human	Sensitising
1,1'-Methylenebis[isocyanatobenzene], homopolymer	Human	Sensitising
Diphenylmethane-2,4'-diisocyanate	Human	Sensitising

**Germ Cell Mutagenicity**

Name	Route	Value
Glass, oxide, chemicals	In Vitro	Some positive data exist, but the data are not sufficient for classification
Diphenylmethane-4,4'-diisocyanate	In Vitro	Some positive data exist, but the data are not sufficient for classification
1,1'-Methylenebis[isocyanatobenzene], homopolymer	In Vitro	Some positive data exist, but the data are not sufficient for classification
Polyethylene terephthalate	In Vitro	Not mutagenic
Diphenylmethane-2,4'-diisocyanate	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

**Carcinogenicity**

Name	Route	Species	Value
Glass, oxide, chemicals	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Diphenylmethane-4,4'-diisocyanate	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
1,1'-Methylenebis[isocyanatobenzene], homopolymer	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Diphenylmethane-2,4'-diisocyanate	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
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**3M Scotchcast One-Step Splint**

Diphenylmethane-4,4'-diisocyanate	Inhalation	Not classified for development	Rat	NOAEL 0.004 mg/l	during organogenesis
1,1'-Methylenebis[isocyanatobenzene], homopolymer	Inhalation	Not classified for development	Rat	NOAEL 0.004 mg/l	during organogenesis
Diphenylmethane-2,4'-diisocyanate	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

**Target Organ(s)**
**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Diphenylmethane-4,4'-diisocyanate	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	
1,1'-Methylenebis[isocyanatobenzene], homopolymer	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	
Diphenylmethane-2,4'-diisocyanate	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Glass, oxide, chemicals	Inhalation	respiratory system	Not classified	Human	NOAEL not available	occupational exposure
Diphenylmethane-4,4'-diisocyanate	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks
1,1'-Methylenebis[isocyanatobenzene], homopolymer	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks
(Z)-9-Octadecen-1-ol ethoxylated	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 2,500 mg/kg/day	90 days
(Z)-9-Octadecen-1-ol ethoxylated	Ingestion	liver	Not classified	Dog	NOAEL 875 mg/kg/day	90 days
Polyethylene terephthalate	Ingestion	heart   skin   endocrine system   bone, teeth, nails, and/or hair   hematopoietic system   liver   immune system   muscles   nervous system   eyes   kidney and/or bladder   respiratory system	Not classified	Rat	NOAEL Not available	13 weeks
Diphenylmethane-2,4'-diisocyanate	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks
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	Not classified	Rat	NOAEL 500	2 generation

**3M Scotchcast One-Step Splint**

		bladder			mg/kg/day	
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

**Aspiration Hazard**

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

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

**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****Ecotoxic to terrestrial vertebrates**

## 9.3B Terrestrial vertebrate toxicity

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
Glass, oxide, chemicals	65997-17-3	Green algae	Experimental	72 hours	EC50	>1,000 mg/l
Glass, oxide, chemicals	65997-17-3	Water flea	Experimental	72 hours	EC50	>1,000 mg/l
Glass, oxide, chemicals	65997-17-3	Zebra Fish	Experimental	96 hours	LC50	>1,000 mg/l
Glass, oxide, chemicals	65997-17-3	Green algae	Experimental	72 hours	NOEC	≥1,000 mg/l
Diphenylmethane-4,4'-diisocyanate	101-68-8	Green algae	Estimated	72 hours	EC50	>1,640 mg/l
Diphenylmethane-4,4'-diisocyanate	101-68-8	Water flea	Estimated	24 hours	EC50	>1,000 mg/l
Diphenylmethane-4,4'-diisocyanate	101-68-8	Zebra Fish	Estimated	96 hours	LC50	>1,000 mg/l
Diphenylmethane-4,4'-diisocyanate	101-68-8	Green algae	Estimated	72 hours	NOEC	1,640 mg/l
Diphenylmethane-4,4'-diisocyanate	101-68-8	Water flea	Estimated	21 days	NOEC	10 mg/l
1,1'-Methylenebis[isocyanate]	39310-05-9	Water flea	Estimated	24 hours	EC50	>100 mg/l

**3M Scotchcast One-Step Splint**

socyanatobenzene], homopolymer						
Polyurethane foam	9009-54-5		Data not available or insufficient for classification			
Oxirane, Polymer with Methyloxirane, ether with 1,2-Propanediol (2:1)	Trade Secret		Data not available or insufficient for classification			
(Z)-9-Octadecen-1-ol ethoxylated	9004-98-2		Data not available or insufficient for classification			
Diphenylmethane-2,4'-diisocyanate	5873-54-1	Green algae	Estimated	72 hours	EC50	>100 mg/l
Diphenylmethane-2,4'-diisocyanate	5873-54-1	Water flea	Estimated	24 hours	EC50	>100 mg/l
Diphenylmethane-2,4'-diisocyanate	5873-54-1	Water flea	Estimated	21 days	NOEC	100 mg/l
Fluorocarbon polymer	Trade Secret		Data not available or insufficient for classification			
Polyethylene terephthalate	25038-59-9		Data not available or insufficient for classification			
Polyol-ether	Trade Secret	Golden Orfe	Experimental	96 hours	LC50	>1,000 mg/l
Polyol-ether	Trade Secret	Green Algae	Experimental	72 hours	EC50	>100 mg/l
Polyol-ether	Trade Secret	Water flea	Experimental	48 hours	EC50	>100 mg/l
Polyol-ether	Trade Secret	Green Algae	Experimental	72 hours	NOEC	>=100 mg/l
Wollastonite	13983-17-0		Data not available or insufficient for classification			
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	LC50	>100 mg/l
2,6-Di-tert-butyl-p-cresol	128-37-0	Green algae	Experimental	72 hours	Effect Concentration 10%	0.4 mg/l
2,6-Di-tert-butyl-p-cresol	128-37-0	Ricefish	Experimental	42 days	NOEC	0.053 mg/l
2,6-Di-tert-	128-37-0	Water flea	Experimental	21 days	NOEC	0.023 mg/l

**3M Scotchcast One-Step Splint**

butyl-p-cresol						
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**12.2. Persistence and degradability**

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Glass, oxide, chemicals	65997-17-3	Data not availbl-insufficient			N/A	
Diphenylmethane-4,4'-diisocyanate	101-68-8	Estimated Hydrolysis		Hydrolytic half-life	20 hours (t 1/2)	Other methods
1,1'-Methylenebis[isocyanatobenzene], homopolymer	39310-05-9	Estimated Hydrolysis		Hydrolytic half-life	<2 hours (t 1/2)	Other methods
1,1'-Methylenebis[isocyanatobenzene], homopolymer	39310-05-9	Estimated Biodegradation	28 days	BOD	0 % weight	OECD 301C - MITI test (I)
Polyurethane foam	9009-54-5	Data not availbl-insufficient			N/A	
Oxirane, Polymer with Methyloxirane, ether with 1,2-Propanediol (2:1)	Trade Secret	Data not availbl-insufficient			N/A	
(Z)-9-Octadecen-1-ol ethoxylated	9004-98-2	Data not availbl-insufficient			N/A	
Fluorocarbon polymer	Trade Secret	Data not availbl-insufficient			N/A	
Polyethylene terephthalate	25038-59-9	Data not availbl-insufficient			N/A	
Polyol-ether	Trade Secret	Experimental Biodegradation	28 days	CO2 evolution	38 % weight	OECD 301B - Modified sturm or CO2
Wollastonite	13983-17-0	Data not availbl-insufficient			N/A	
2,6-Di-tert-butyl-p-cresol	128-37-0	Experimental Biodegradation	28 days	BOD	4.5 % BOD/ThBOD	OECD 301C - MITI test (I)

**12.3 : Bioaccumulative potential**

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Glass, oxide, chemicals	65997-17-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Diphenylmethane	101-68-8	Experimental	28 days	Bioaccumulatio	200	OECD 305E -

**3M Scotchcast One-Step Splint**

ne-4,4'-diisocyanate		BCF-Carp		n factor		Bioaccumulation flow-through fish test
1,1'-Methylenebis[isocyanatobenzene], homopolymer	39310-05-9	Estimated BCF-Carp	28 days	Bioaccumulation factor	200	Other methods
Polyurethane foam	9009-54-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Oxirane, Polymer with Methyloxirane, ether with 1,2-Propanediol (2:1)	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
(Z)-9-Octadecen-1-ol ethoxylated	9004-98-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Diphenylmethane-2,4'-diisocyanate	5873-54-1	Estimated BCF-Carp	28 days	Bioaccumulation factor	200	Other methods
Fluorocarbon polymer	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Polyethylene terephthalate	25038-59-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Polyol-ether	Trade Secret	Experimental BCF-Carp	42 days	Bioaccumulation factor	≤7	Other methods
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

**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**

In accordance with the Hazardous Substances (Disposal) Notice 2017 and the relevant criteria of the HSNO Act 1996.

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

### 3M Scotchcast One-Step Splint

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. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

Packaging (that may or may not contain any residual substance) may be lawfully disposed of by householders or other consumers through public or commercial waste collection services.

## SECTION 14: Transport Information

### New Zealand Land Transport Rule: Dangerous Goods - 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

HSNO Approval number	HSR002552
Group standard name	Cosmetic Products Group Standard 2017
HSNO Hazard classification	Refer to Section 2: Hazard identification

### NZ Inventory of Chemicals (NZIoC) Status

All applicable chemical ingredients in this material are in compliance with NZIoC listing requirements.

### Controls in accordance with the Health and Safety at Work (Hazardous Substances) Regulations 2017

Certified handler	Not required
Location Compliance Certificate	Not required
Hazardous atmosphere zone	Not required
Fire extinguishers	Not required
Emergency response plan	100 L or 100 kg (for a HSNO 9.1A substance); or 1,000 L or 1,000 kg (for a HSNO 6.1D, 6.5A, 6.5B, 9.1B or 9.1C substance); or 10,000 L or 10,000 kg



### 3M Scotchcast One-Step Splint

Secondary containment	(for 6.7B, 6.9A, 8.2C, 8.3A, 9.1D substance) 100 L or 100 kg (for a HSNO 9.1A substance); or 1,000 L or 1,000 kg (for a HSNO 6.1D, 6.5A, 6.5B, 9.1B or 9.1C substance); or 10,000 L or 10,000 kg (for 6.7B, 6.9A, 8.2C, 8.3A, 9.1D substance)
Tracking	Not required
Warning signage	100 L or 100 kg (for a HSNO 9.1A substance); or 1,000 L or 1,000 kg (for a HSNO 8.2C, 8.3A, 9.1B or 9.1C substance); ,or 10,000 L or 10,000 kg (for a HSNO 6.1D or 9.1D substance)

## SECTION 16: Other information

### Revision information:

Complete document review.

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### Key to abbreviations and acronyms

**GHS** means the Globally Harmonised System of Classification and Labelling of Chemicals, 5th revised edition 2013

**HSNO** means Hazardous Substances and New Organisms Act 1996

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