



## Safety Data Sheet

Copyright, 2026, 3M Company.

All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

<b>Document Group:</b>	16-3092-0	<b>Version Number:</b>	4.00
<b>Issue Date:</b>	05/19/2026	<b>Supersedes Date:</b>	09/22/2024

This Safety Data Sheet has been prepared in accordance with the DENR Administrative Order No. 2015-09 Rules and Procedures for the Implementation of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) in Preparation of Safety Data Sheet (SDS) and Labelling Requirements of Toxic Chemical Substances.

### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Marine Adhesive Sealant 5200, White, PN 05203, PN 05206, PN 06500

#### Product Identification Numbers

60-9800-4300-8

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

##### Recommended use

Marine Adhesive Sealant, One-part Polyurethane Adhesive for Marine Applications.

For Industrial or Professional use only

#### 1.3. Supplier's details

<b>ADDRESS:</b>	3M Philippines, Inc., 18th Floor, Bonifacio Stopover Corporate Center, 31st Street corner, 2nd Avenue, Bonifacio Global City, Taguig City, 1635 Philippines
<b>Telephone:</b>	+632 827 11680
<b>E Mail:</b>	mcvillalva@mmm.com
<b>Website:</b>	www.3m.com/ph

#### 1.4. Emergency telephone number

+632 827 11680

### SECTION 2: Hazard identification

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

Acute Toxicity (inhalation): Category 4.

Respiratory Sensitizer: Category 1.

Skin Sensitizer: Category 1.

Carcinogenicity: Category 1B.

Reproductive Toxicity: Category 1B.

Chronic Aquatic Toxicity: Category 2.

#### 2.2. Label elements

### Signal word

Danger

### Symbols

Exclamation mark |Health Hazard |Environment |

### Pictograms



### Hazard statements

H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H350	May cause cancer.
H360	May damage fertility or the unborn child.
H411	Toxic to aquatic life with long lasting effects.

### Precautionary statements

#### General:

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

#### Prevention:

P201	Obtain special instructions before use.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280K	Wear protective gloves and if needed, respiratory protection (see SDS Section 8).

#### Response:

P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308 + P313	IF exposed or concerned: Get medical attention.
P312	Call a POISON CENTER or doctor if you feel unwell.
P333 + P313	If skin irritation or rash occurs: Get medical attention.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

#### Storage:

P405	Store locked up.
------	------------------

#### Disposal:

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

### 2.3. Other hazards

Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates. Although titanium dioxide is classified as a carcinogen, exposures associated with this health effect are not expected during normal, intended use of this product.

## SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt
Talc	14807-96-6	10 - 30
Titanium Dioxide	13463-67-7	3 - 7
Alkyl Isocyanate Silane	85702-90-5	1 - 5
Carbitol Acetate	112-15-2	1 - 5
Fumed Silica	112945-52-5	1 - 5
Zinc Oxide	1314-13-2	1 - < 2.5
Toluene Diisocyanate	26471-62-5	0.1 - < 1
Toluene	108-88-3	<= 0.75

## 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).

### 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 carbon dioxide or dry chemical extinguisher to extinguish.

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

None inherent in this product.

### Hazardous Decomposition or By-Products

**Substance**

Isocyanates  
Carbon monoxide  
Carbon dioxide  
Hydrogen Cyanide  
Irritant Vapors or Gases  
Oxides of Nitrogen  
Oxides of Sulfur

**Condition**

During Combustion  
During Combustion  
During Combustion  
During Combustion  
During Combustion  
During Combustion  
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. Use personal protective equipment based on the results of an exposure assessment. Refer to Section 8 for PPE recommendations. If anticipated exposure resulting from an accidental release exceeds the protective capabilities of the PPE listed in Section 8, or are unknown, select PPE that offers an appropriate level of protection. Consider the physical and chemical hazards of the material when doing so. Examples of PPE ensembles for emergency response could include wearing bunker gear for a release of flammable material; wearing chemical protective clothing if the spilled material is a corrosive, a sensitizer, a significant dermal irritant, or can be absorbed through the skin; or donning a positive pressure supplied-air respirator for chemicals with inhalation hazards. For information regarding physical and health hazards, refer to sections 2 and 11 of the SDS.

### 6.2. Environmental precautions

Avoid release to the environment.

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

Pour isocyanate decontaminant solution (90% water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Or pour water on spill and allow to react for more than 30 minutes. Cover with absorbent material. 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

Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/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. Avoid release to the environment. Wash contaminated clothing before reuse. Use personal protective equipment (gloves, respirators, etc.) as required.

### 7.2. Conditions for safe storage including any incompatibilities

Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Keep cool. Protect from sunlight. Store away from heat. 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	C.A.S. No.	Agency	Limit type	Additional Comments
Toluene	108-88-3	ACGIH	TWA:20 ppm	A4: Not class. as human carcin, Ototoxicant
Toluene	108-88-3	Philippines OELs	TWA(8 hours):375 mg/m <sup>3</sup> (100 ppm)	
Silica: Crystalline: Amorphous, including natural diatomaceous earth	112945-52-5	Philippines OELs	TWA(8 hours):0.8 mg/m <sup>3</sup>	
Zinc Oxide	1314-13-2	ACGIH	TWA(respirable fraction):2	

			mg/m3;STEL(respirable fraction):10 mg/m3	
Zinc Oxide	1314-13-2	Philippines OELs	TWA(as fume)(8 hours):1 mg/m3	
Titanium Dioxide	13463-67-7	ACGIH	TWA(Respirable nanoscale particles):0.2 mg/m3;TWA(Respirable finescale particles):2.5 mg/m3	A3: Confirmed animal carcin.
Titanium Dioxide	13463-67-7	Philippines OELs	TWA(8 hours):15 mg/m3	
Talc	14807-96-6	ACGIH	TWA(respirable fraction):2 mg/m3	A4: Not class. as human carcin
Talc	14807-96-6	Philippines OELs	TWA (calculated) mppcf(8 hours):2.4 millions of particles/cu. ft.	
Toluene Diisocyanate	26471-62-5	ACGIH	TWA(inhalable fraction and vapor):0.001 ppm;STEL(inhalable fraction and vapor):0.005 ppm	A3: Confirmed animal carcin., Dermal/Respiratory Sensitizer

ACGIH : American Conference of Governmental Industrial Hygienists  
 AIHA : American Industrial Hygiene Association  
 CMRG : Chemical Manufacturer's Recommended Guidelines  
 Philippines OELs : Philippines. Threshold Limit Values for Airborne Contaminants  
 TWA: Time-Weighted-Average  
 STEL: Short Term Exposure Limit  
 CEIL: 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/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

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

**Eye/face protection**

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:  
 Safety Glasses with side shields

**Skin/hand protection**

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended: Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (e.g., spraying, high splash potential, etc.), then use of a protective apron may be necessary. See recommended glove material(s) for determining appropriate apron material(s). If a glove material is not available as an apron, polymer laminate is a suitable option.

**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:

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

Half facepiece or full facepiece supplied-air respirator

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

## SECTION 9: Physical and chemical properties

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

Physical state	Solid
Specific Physical Form:	Paste
Color	White
Odor	Mild Urethane
Odor 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	No Data Available
Flammability	Not Applicable
Flammable Limits(LEL)	No Data Available
Flammable Limits(UEL)	No Data Available
Vapor Pressure	No Data Available
Relative Vapor Density	No Data Available
Density	1.36 g/ml
Relative Density	1.36 [Ref Std:WATER=1]
Water solubility	No Data Available
Solubility- non-water	No Data Available
Partition coefficient: n-octanol/ water	No Data Available
Autoignition temperature	Not Applicable
Decomposition temperature	No Data Available
Kinematic Viscosity	220,588 mm <sup>2</sup> /sec
Volatile Organic Compounds	No Data Available
Percent volatile	2.9 % weight
VOC Less H <sub>2</sub> O & Exempt Solvents	40 g/l [Test Method:tested per EPA method 24]
Molecular weight	No Data Available

Particle Characteristics	Not Applicable
--------------------------	----------------

## 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 polymerization will not occur.

#### 10.4. Conditions to avoid

Heat

#### 10.5. Incompatible materials

Reaction with water, alcohols, and amines is not hazardous if container can vent to the atmosphere to prevent pressure buildup.

Amines  
Alcohols  
Water

#### 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 labeling, 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:

Harmful if inhaled. 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:

Contact with the skin during product use is not expected to result in significant irritation. 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:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. May cause additional health effects (see below).

#### Additional Health Effects:

##### Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

##### Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

#### Additional Information:

Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates.

**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	Inhalation-Vapor(4 hr)		No data available; calculated ATE >10 - =20 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Talc	Dermal		LD50 estimated to be > 5,000 mg/kg
Talc	Ingestion		LD50 estimated to be > 5,000 mg/kg
Titanium Dioxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium Dioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 6.82 mg/l
Titanium Dioxide	Ingestion	Rat	LD50 > 10,000 mg/kg
Fumed Silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Fumed Silica	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Fumed Silica	Ingestion	Rat	LD50 > 5,110 mg/kg
Zinc Oxide	Dermal		LD50 estimated to be > 5,000 mg/kg
Zinc Oxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.7 mg/l
Zinc Oxide	Ingestion	Rat	LD50 > 5,000 mg/kg
Carbitol Acetate	Dermal	Rabbit	LD50 15,000 mg/kg
Carbitol Acetate	Ingestion	Rat	LD50 11,000 mg/kg
Alkyl Isocyanate Silane	Dermal	Rabbit	LD50 > 2,000 mg/kg
Alkyl Isocyanate Silane	Ingestion	Rat	LD50 > 5,000 mg/kg
Toluene	Dermal	Rat	LD50 12,000 mg/kg
Toluene	Inhalation-Vapor (4 hours)	Rat	LC50 30 mg/l
Toluene	Ingestion	Rat	LD50 5,550 mg/kg
Toluene Diisocyanate	Inhalation-Vapor (4 hours)	Mouse	LC50 0.12 mg/l
Toluene Diisocyanate	Dermal	Rabbit	LD50 > 9,400 mg/kg
Toluene Diisocyanate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.35 mg/l
Toluene Diisocyanate	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
Talc	Rabbit	No significant irritation
Titanium Dioxide	Rabbit	No significant irritation
Fumed Silica	Rabbit	No significant irritation
Zinc Oxide	Human and animal	No significant irritation
Carbitol Acetate	Human and animal	Minimal irritation
Alkyl Isocyanate Silane	Rabbit	Minimal irritation
Toluene	Rabbit	Irritant
Toluene Diisocyanate	Rabbit	Irritant

**Serious Eye Damage/Irritation**

Name	Species	Value
Talc	Rabbit	No significant irritation
Titanium Dioxide	Rabbit	No significant irritation
Fumed Silica	Rabbit	No significant irritation
Zinc Oxide	Rabbit	Mild irritant
Carbitol Acetate	Rabbit	Severe irritant
Alkyl Isocyanate Silane	Rabbit	No significant irritation
Toluene	Rabbit	Moderate irritant
Toluene Diisocyanate	Rabbit	Corrosive

**Sensitization:****Skin Sensitization**

Name	Species	Value
Titanium Dioxide	Human and animal	Not classified
Fumed Silica	Human and animal	Not classified
Zinc Oxide	Guinea pig	Not classified
Carbitol Acetate	Human and animal	Not classified
Alkyl Isocyanate Silane	Guinea pig	Sensitizing
Toluene	Guinea pig	Not classified
Toluene Diisocyanate	Human and animal	Sensitizing

**Respiratory Sensitization**

Name	Species	Value
Talc	Human	Not classified
Alkyl Isocyanate Silane	official classification	Sensitizing
Toluene Diisocyanate	Human	Sensitizing

**Germ Cell Mutagenicity**

Name	Route	Value
Talc	In Vitro	Not mutagenic
Talc	In vivo	Not mutagenic
Titanium Dioxide	In Vitro	Not mutagenic
Titanium Dioxide	In vivo	Not mutagenic
Fumed Silica	In Vitro	Not mutagenic
Zinc Oxide	In Vitro	Some positive data exist, but the data are not sufficient for classification
Zinc Oxide	In vivo	Some positive data exist, but the data are not sufficient for classification
Carbitol Acetate	In Vitro	Not mutagenic
Alkyl Isocyanate Silane	In Vitro	Not mutagenic
Alkyl Isocyanate Silane	In vivo	Not mutagenic
Toluene	In Vitro	Not mutagenic
Toluene	In vivo	Not mutagenic
Toluene Diisocyanate	In Vitro	Some positive data exist, but the data are not

		sufficient for classification
--	--	-------------------------------

**Carcinogenicity**

Name	Route	Species	Value
Talc	Dermal	Human	Some positive data exist, but the data are not sufficient for classification
Talc	Inhalation	Rat	Carcinogenic
Titanium Dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium Dioxide	Inhalation	Rat	Carcinogenic
Fumed Silica	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification
Toluene	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Toluene	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
Toluene	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
Toluene Diisocyanate	Inhalation	Human and animal	Not carcinogenic
Toluene Diisocyanate	Ingestion	Multiple animal species	Carcinogenic

**Reproductive Toxicity**

**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
Talc	Ingestion	Not classified for development	Rat	NOAEL 1,600 mg/kg	during organogenesis
Fumed Silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Fumed Silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Fumed Silica	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
Zinc Oxide	Ingestion	Not classified for reproduction and/or development	Multiple animal species	NOAEL 125 mg/kg/day	premating & during gestation
Toluene	Inhalation	Not classified for female reproduction	Human	NOAEL Not available	occupational exposure
Toluene	Inhalation	Not classified for male reproduction	Rat	NOAEL 2.3 mg/l	1 generation
Toluene	Ingestion	Toxic to development	Rat	LOAEL 520 mg/kg/day	during gestation
Toluene	Inhalation	Toxic to development	Human	NOAEL Not available	poisoning and/or abuse
Toluene Diisocyanate	Inhalation	Not classified for female reproduction	Rat	NOAEL 0.002 mg/l	2 generation
Toluene Diisocyanate	Inhalation	Not classified for male reproduction	Rat	NOAEL 0.002 mg/l	2 generation
Toluene Diisocyanate	Inhalation	Not classified for development	Rat	NOAEL 0.004 mg/l	during organogenesis

**Target Organ(s)**

**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Carbitol Acetate	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and	NOAEL Not available	not applicable

				animal		
Carbitol Acetate	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not applicable
Toluene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Toluene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Toluene	Inhalation	immune system	Not classified	Mouse	NOAEL 0.004 mg/l	3 hours
Toluene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
Toluene Diisocyanate	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	occupational exposure

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Talc	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Talc	Inhalation	pulmonary fibrosis	Not classified	Rat	NOAEL 18 mg/m3	113 weeks
Talc	Inhalation	respiratory system	Not classified	Rat	NOAEL 18 mg/m3	113 weeks
Titanium Dioxide	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.01 mg/l	2 years
Titanium Dioxide	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
Fumed Silica	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
Fumed Silica	Inhalation	silicosis	Not classified	Human	NOAEL Not available	occupational exposure
Zinc Oxide	Ingestion	nervous system	Not classified	Rat	NOAEL 600 mg/kg/day	10 days
Zinc Oxide	Ingestion	endocrine system	Not classified	Other	NOAEL 500 mg/kg/day	6 months
Zinc Oxide	Ingestion	hematopoietic system	Not classified	Other	NOAEL 500 mg/kg/day	6 months
Zinc Oxide	Ingestion	kidney and/or bladder	Not classified	Other	NOAEL 500 mg/kg/day	6 months
Carbitol Acetate	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.48 mg/l	2 weeks
Carbitol Acetate	Inhalation	liver	Not classified	Rat	NOAEL 0.48 mg/l	2 weeks
Carbitol Acetate	Inhalation	immune system	Not classified	Rat	NOAEL 0.48 mg/l	2 weeks
Carbitol Acetate	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 0.48 mg/l	2 weeks
Alkyl Isocyanate Silane	Ingestion	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
Alkyl Isocyanate Silane	Ingestion	heart	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
Alkyl Isocyanate Silane	Ingestion	endocrine system	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
Alkyl Isocyanate Silane	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
Alkyl Isocyanate Silane	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
Toluene	Inhalation	auditory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse

Toluene	Inhalation	nervous system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Toluene	Inhalation	eyes	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Toluene	Inhalation	olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Toluene	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 2.3 mg/l	15 months
Toluene	Inhalation	heart	Not classified	Rat	NOAEL 11.3 mg/l	15 weeks
Toluene	Inhalation	liver	Not classified	Rat	NOAEL 11.3 mg/l	15 weeks
Toluene	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 11.3 mg/l	15 weeks
Toluene	Inhalation	endocrine system	Not classified	Rat	NOAEL 1.1 mg/l	4 weeks
Toluene	Inhalation	immune system	Not classified	Mouse	NOAEL Not available	20 days
Toluene	Inhalation	bone, teeth, nails, and/or hair	Not classified	Mouse	NOAEL 1.1 mg/l	8 weeks
Toluene	Inhalation	hematopoietic system	Not classified	Human	NOAEL Not available	occupational exposure
Toluene	Inhalation	vascular system	Not classified	Human	NOAEL Not available	occupational exposure
Toluene	Inhalation	gastrointestinal tract	Not classified	Multiple animal species	NOAEL 11.3 mg/l	15 weeks
Toluene	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 625 mg/kg/day	13 weeks
Toluene	Ingestion	heart	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	liver	Not classified	Multiple animal species	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	kidney and/or bladder	Not classified	Multiple animal species	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	hematopoietic system	Not classified	Mouse	NOAEL 600 mg/kg/day	14 days
Toluene	Ingestion	endocrine system	Not classified	Mouse	NOAEL 105 mg/kg/day	28 days
Toluene	Ingestion	immune system	Not classified	Mouse	NOAEL 105 mg/kg/day	4 weeks
Toluene Diisocyanate	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL 0 mg/l	occupational exposure

**Aspiration Hazard**

Name	Value
Toluene	Aspiration hazard

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 labeling, 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

### Chronic aquatic hazard:

GHS Chronic 2: Toxic to aquatic life with long lasting effects

No product test data available

Material	Cas #	Organism	Type	Exposure	Test Endpoint	Test Result
Talc	14807-96-6	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Titanium Dioxide	13463-67-7	Activated sludge	Experimental	3 hours	NOEC	>=1,000 mg/l
Titanium Dioxide	13463-67-7	Diatom	Experimental	72 hours	EC50	>10,000 mg/l
Titanium Dioxide	13463-67-7	Fathead Minnow	Experimental	96 hours	LC50	>100 mg/l
Titanium Dioxide	13463-67-7	Water flea	Experimental	48 hours	EC50	>100 mg/l
Titanium Dioxide	13463-67-7	Diatom	Experimental	72 hours	NOEC	5,600 mg/l
Alkyl Isocyanate Silane	85702-90-5	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Carbitol Acetate	112-15-2	Fathead Minnow	Experimental	96 hours	LC50	110 mg/l
Carbitol Acetate	112-15-2	Green algae	Experimental	72 hours	EC50	>100 mg/l
Carbitol Acetate	112-15-2	Water flea	Experimental	48 hours	EC50	>100 mg/l
Carbitol Acetate	112-15-2	Green algae	Experimental	72 hours	NOEC	100 mg/l
Fumed Silica	112945-52-5	Green algae	Analogous Compound	72 hours	ErC50	>173.1 mg/l
Fumed Silica	112945-52-5	Sediment organism	Analogous Compound	96 hours	EC50	8,500 mg/kg (Dry Weight)
Fumed Silica	112945-52-5	Water flea	Analogous Compound	24 hours	EL50	>10,000 mg/l
Fumed Silica	112945-52-5	Zebra Fish	Analogous Compound	96 hours	LL50	>10,000 mg/l
Fumed Silica	112945-52-5	Green algae	Analogous Compound	72 hours	NOEC	173.1 mg/l
Fumed Silica	112945-52-5	Water flea	Analogous Compound	21 days	NOEC	68 mg/l
Fumed Silica	112945-52-5	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
Zinc Oxide	1314-13-2	Activated sludge	Estimated	3 hours	EC50	6.5 mg/l
Zinc Oxide	1314-13-2	Green algae	Estimated	72 hours	EC50	0.052 mg/l
Zinc Oxide	1314-13-2	Rainbow Trout	Estimated	96 hours	LC50	0.21 mg/l
Zinc Oxide	1314-13-2	Water flea	Estimated	48 hours	EC50	0.07 mg/l
Zinc Oxide	1314-13-2	Green algae	Estimated	72 hours	NOEC	0.006 mg/l
Zinc Oxide	1314-13-2	Water flea	Estimated	7 days	NOEC	0.02 mg/l
Toluene Diisocyanate	26471-62-5	Green algae	Hydrolysis Product	72 hours	ErC50	18 mg/l
Toluene Diisocyanate	26471-62-5	Medaka	Hydrolysis Product	96 hours	LC50	>100 mg/l
Toluene Diisocyanate	26471-62-5	Water flea	Hydrolysis Product	48 hours	EC50	1.6 mg/l
Toluene Diisocyanate	26471-62-5	Water flea	Experimental	21 days	NOEC	0.5 mg/l
Toluene Diisocyanate	26471-62-5	Green algae	Hydrolysis Product	72 hours	NOEC	1 mg/l
Toluene Diisocyanate	26471-62-5	Activated sludge	Experimental	3 hours	EC50	>100 mg/l
Toluene Diisocyanate	26471-62-5	Oats	Experimental	14 days	EC50	>1,000 mg/kg (Dry Weight)
Toluene Diisocyanate	26471-62-5	Redworm	Experimental	14 days	LC50	>1,000 mg/kg (Dry Weight)
Toluene	108-88-3	Coho Salmon	Experimental	96 hours	LC50	5.5 mg/l
Toluene	108-88-3	Grass Shrimp	Experimental	96 hours	LC50	9.5 mg/l
Toluene	108-88-3	Green algae	Experimental	72 hours	EC50	12.5 mg/l
Toluene	108-88-3	Leopard frog	Experimental	9 days	LC50	0.39 mg/l
Toluene	108-88-3	Pink Salmon	Experimental	96 hours	LC50	6.41 mg/l
Toluene	108-88-3	Water flea	Experimental	48 hours	EC50	3.78 mg/l
Toluene	108-88-3	Coho Salmon	Experimental	40 days	NOEC	1.39 mg/l

Toluene	108-88-3	Diatom	Experimental	72 hours	NOEC	10 mg/l
Toluene	108-88-3	Water flea	Experimental	7 days	NOEC	0.74 mg/l
Toluene	108-88-3	Activated sludge	Experimental	12 hours	IC50	292 mg/l
Toluene	108-88-3	Bacteria	Experimental	16 hours	NOEC	29 mg/l
Toluene	108-88-3	Bacteria	Experimental	24 hours	EC50	84 mg/l
Toluene	108-88-3	Redworm	Experimental	28 days	LC50	>150 mg per kg of bodyweight
Toluene	108-88-3	Soil microbes	Experimental	28 days	NOEC	<26 mg/kg (Dry Weight)

**12.2. Persistence and degradability**

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Talc	14807-96-6	Data not available - insufficient	N/A	N/A	N/A	N/A
Titanium Dioxide	13463-67-7	Data not available - insufficient	N/A	N/A	N/A	N/A
Alkyl Isocyanate Silane	85702-90-5	Data not available - insufficient	N/A	N/A	N/A	N/A
Carbitol Acetate	112-15-2	Experimental Biodegradation	28 days	Biological Oxygen Demand	100 %BOD/ThOD	OECD 301C - MITI (I)
Fumed Silica	112945-52-5	Data not available - insufficient	N/A	N/A	N/A	N/A
Zinc Oxide	1314-13-2	Data not available - insufficient	N/A	N/A	N/A	N/A
Toluene Diisocyanate	26471-62-5	Hydrolysis product Biodegradation	14 days	Biological Oxygen Demand	0 %BOD/ThOD	OECD 301C - MITI (I)
Toluene Diisocyanate	26471-62-5	Experimental Aquatic Inherent Biodegrad.	28 days	Biological Oxygen Demand	0 %BOD/ThOD	OECD 302C - Modified MITI (II)
Toluene Diisocyanate	26471-62-5	Experimental Photolysis		Photolytic half-life (in air)	4.3 days (t 1/2)	
Toluene Diisocyanate	26471-62-5	Analogous Compound Hydrolysis		Hydrolytic half-life	<1.6 hours (t 1/2)	
Toluene	108-88-3	Experimental Biodegradation	20 days	Biological Oxygen Demand	80 %BOD/ThOD	APHA Std Meth Water/Wastewater
Toluene	108-88-3	Experimental Photolysis		Photolytic half-life (in air)	5.2 days (t 1/2)	

**12.3. Bioaccumulative potential**

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Talc	14807-96-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Titanium Dioxide	13463-67-7	Experimental BCF - Fish	42 days	Bioaccumulation Factor	9.6	
Alkyl Isocyanate Silane	85702-90-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Carbitol Acetate	112-15-2	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	0.74	
Fumed Silica	112945-52-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Zinc Oxide	1314-13-2	Experimental BCF - Fish	56 days	Bioaccumulation Factor	≤217	OECD305-Bioconcentration
Toluene Diisocyanate	26471-62-5	Analogous Compound BCF - Fish	60 days	Bioaccumulation Factor	180	OECD305-Bioconcentration

Toluene Diisocyanate	26471-62-5	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	3.43	OECD 117 log Kow HPLC method
Toluene	108-88-3	Experimental BCF - Other	72 hours	Bioaccumulation Factor	90	
Toluene	108-88-3	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	2.73	

**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 waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. 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.

**SECTION 14: Transport Information**

**Marine Transport (IMDG)**

- UN Number:**None assigned.
- Proper Shipping Name:**None assigned.
- Technical Name:**None assigned.
- Hazard Class/Division:**None assigned.
- Subsidiary Risk:**None assigned.
- Packing Group:**None assigned.
- Limited Quantity:**None assigned.
- Marine Pollutant:** None assigned.
- Marine Pollutant Technical Name:** None assigned.
- Other Dangerous Goods Descriptions:**  
Not restricted, as per IMDG code 2.10.2.7, marine pollutant exception.

**Air Transport (IATA)**

- UN Number:**None assigned.
- Proper Shipping Name:**None assigned.
- Technical Name:**None assigned.
- Hazard Class/Division:**None assigned.
- Subsidiary Risk:**None assigned.
- Packing Group:**None assigned.
- Limited Quantity:**None assigned.
- Marine Pollutant:** None assigned.
- Marine Pollutant Technical Name:** None assigned.
- Other Dangerous Goods Descriptions:**  
Not restricted, as per Special Provision A197, environmentally hazardous substance exception.

Transportation classifications are provided as a customer service. As for shipping, YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M's transportation classifications are based on product formulation, packaging, 3M policies and 3M's understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling or marking requirements. The above information is only for reference. If you are shipping by air or ocean, YOU are advised to check & meet applicable regulatory requirements.

## **SECTION 15: Regulatory information**

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

#### **Global inventory status**

Contact 3M for more information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

## **SECTION 16: Other information**

#### **Revision information:**

Section 01: Address information was modified.  
Section 02: Hazard - Other information was modified.  
Section 02: PH Pictogram information was modified.  
Section 02: PH Precautionary - Disposal information was modified.  
Section 02: PH Precautionary - General information was added.  
Section 02: PH Precautionary - Prevention information was modified.  
Section 02: PH Precautionary - Response information was modified.  
Section 03: Ingredient table information was modified.  
Section 06: Accidental release personal information information was modified.  
Section 07: Conditions safe storage information was modified.  
Section 07: Precautions safe handling information information was modified.  
Section 08: Occupational exposure limit table information was modified.  
Section 08: Personal Protection - Apron Statement information was added.  
Section 08: Personal Protection - Skin/body information information was deleted.  
Section 08: Skin protection - protective clothing information information was deleted.  
Section 08: Skin protection - recommended gloves information information was modified.  
Section 08: Skin protection - recommended gloves text information was added.  
Section 08: Skin protection - recommended gloves text information was deleted.  
Section 09: Vapor Density Value information was modified.  
Section 11: Acute Toxicity table information was modified.  
Section 11: Aspiration Hazard Table information was modified.  
Section 11: Carcinogenicity Table information was modified.  
Section 11: Germ Cell Mutagenicity Table information was modified.  
Section 11: Health Effects - Additional Information information was modified.  
Section 11: Health Effects - Ingestion information information was modified.  
Section 11: Health Effects - Inhalation information information was modified.  
Section 11: Health Effects - Skin information information was modified.  
Section 11: Reproductive Toxicity Table information was modified.  
Section 11: Respiratory Sensitization Table information was modified.  
Section 11: Serious Eye Damage/Irritation Table information was modified.  
Section 11: Skin Corrosion/Irritation Table information was modified.  
Section 11: Skin Sensitization Table information was modified.

Section 11: Target Organs - Repeated Table information was modified.

Section 11: Target Organs - Single Table information was modified.

Section 12: Component ecotoxicity information information was modified.

Section 12: No Data text for adverse effects information information was added.

Section 12: Persistence and Degradability information information was modified.

Section 12:Biocumulative potential information information was modified.

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 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.

**3M Philippines SDSs are available at [www.3m.com/ph](http://www.3m.com/ph)**