

Safety Data Sheet

Copyright,2023, 3M Canada 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.

Document group:	19-4647-4	Version number:	15.00
Issue Date:	2023/02/28	Supercedes Date:	2022/12/28

This Safety Data Sheet has been prepared in accordance with the Canadian Hazardous Products Regulations.

SECTION 1	: Identification				
1.1. Product identi 3M [™] Marine Adhe		ck PN 06504, PN 0520	5		
Product Identificatio 60-4100-0948-8 XS-0414-1676-8	on Numbers 60-4400-9508-5	60-9801-0935-3	62-5233-5236-7	UU-0042-1543-8	
1.2. Recommended	l use and restrictions	on use			
Intended Use Marine					
Specific Use Adhesive Sealant fo	or Marine Application	S			
Restrictions on use Not applicable	e				
1.3. Supplier's det	ails				
Company:3M Canada CompanyDivision:Industrial Adhesives and Tapes DivisionAddress:1840 Oxford Street East, Post Office Box 5757, London, OntarioN6A 4T1Telephone:(800) 364-3577Website:www.3M.ca				0 N6A 4T1	

1.4. Emergency telephone number

Medical Emergency Telephone:1-800-3M HELPS / 1-800-364-3577; Transportation Emergency Telephone (CANUTEC): (613) 996-6666

SECTION 2: Hazard identification

The following product identification number(s) are sold in the consumer market place: 60440095085, XS041416768

2.1. Classification of the substance or mixture

Acute Toxicity (inhalation): Category 4.

Respiratory Sensitizer: Category 1A. Skin Sensitizer: Category 1A. Reproductive Toxicity: Category 1B. Carcinogenicity: Category 1B.

2.2. Label elements Signal word Danger

Symbols Exclamation mark | Health Hazard |

Pictograms



Hazard statements

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Harmful if inhaled. May damage fertility or the unborn child. May cause cancer.

Precautionary statements

General: Keep out of reach of children.

Prevention:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. In case of inadequate ventilation wear respiratory protection. Wear protective gloves. Contaminated work clothing must not be allowed out of the workplace.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF exposed or concerned: Get medical advice/attention.

Storage:

Store locked up.

Disposal:

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

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt	Common Name
Urethane Polymer	68611-34-7	40 - 70	Poly[oxy(methyl-1,2-
			ethanediyl)], .alpha.,.alpha.',.alpha."-1,2,3-

			propanetriyltris[. omegahydroxy-,
			polymer with 1,3-
			diisocyanatomethylbenzene and .alpha
			hydroomegahydroxypoly[oxy(methyl-
			1,2-et hanediyl)], isocyanate-terminated
Limestone	1317-65-3	10 - 30	Limestonests primarily of calcium
			carbonate.
Carbon Black	1333-86-4	5 - 10	Carbon black
Carbitol Acetate	112-15-2	1 - 5	Ethanol, 2-(2-ethoxyethoxy)-, acetate
Fumed Silica	112945-52-5	1 - 5	Fumed amorphous silica, crystalline-free
Alkyl Isocyanate Silane	85702-90-5	0.5 - 1.5 Trade Secret *	2,9,11,13-Tetraazanonadecanethioic acid,
			19-isocyanato-11-(6-isocyanatohexyl)-
			10,12-dioxo-, S-[3-(trimethoxysilyl)propyl]
			ester
Toluene Diisocyanate	26471-62-5	0.1 - 1 Trade Secret *	Benzene, 1,3-diisocyanatomethyl-
Toluene	108-88-3	0 - 0.75	No Data Available
Heptane	142-82-5	< 0.3	Heptane
(Gamma-	4420-74-0	< 0.2	1-Propanethiol, 3-(trimethoxysilyl)-
mercaptopropyl)trimethoxysilan			
е			

*The actual concentration of this ingredient has been withheld as a trade secret.

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

DO NOT USE WATER Use a fire fighting agent suitable for the surrounding fire.

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>
Isocyanates	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Hydrogen Cyanide	During Combustion
Irritant Vapours or Gases	During Combustion
Oxides of Nitrogen	During Combustion

5.3. Special protective actions for fire-fighters

Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

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 vapours, 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. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

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. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. 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 with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. 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/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. 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. 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	
Carbon Black	1333-86-4	ACGIH	TWA(inhalable fraction):3 mg/m3	
Heptane	142-82-5	ACGIH	TWA:400 ppm;STEL:500 ppm	
Toluene Diisocyanate	26471-62-5		TWA(inhalable fraction and vapour):0.001 ppm;STEL(inhalable fraction and vapour):0.005 ppm	Dermal/Respiratory Sensitizer

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

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/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eve/face protection to prevent contact based on the results of an exposure assessment. The following eve/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 (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

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 vapours 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

Liquid

Specific Physical Form:	Paste	
Colour	Black	
Odour	Urethane	
Odour threshold	No Data Available	
рН	Not Applicable	
Melting point/Freezing point	Not Applicable	
Boiling point	Not Applicable	
Flash Point	No flash point	
Evaporation rate	No Data Available	
Flammability (solid, gas)	Not Applicable	
Flammable Limits(LEL)	Not Applicable	
Flammable Limits(UEL)	Not Applicable	
Vapour Pressure	No Data Available	
Vapour Density and/or Relative Vapour Density	No Data Available	
Density	1.3 g/cm3	
Relative density	1.3 [<i>Ref Std</i> :WATER=1]	
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	100,000 - 500,000 mPa-s	
Volatile Organic Compounds	2.9 % weight [<i>Test Method</i> :tested per EPA method 24]	
Percent volatile	No Data Available	
VOC Less H2O & Exempt Solvents	38 g/l [Test Method:tested per EPA method 24]	
Molecular weight	No Data Available	

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

Amines

Water

10.6. Hazardous decomposition products

Substance None known. **Condition**

Page: 6 of 12

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:

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.

Ingredient	CAS No.	Class Description	Regulation
Carbon black	1333-86-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Toluene Diisocyanate	26471-62-5	Anticipated human carcinogen	National Toxicology Program Carcinogens
Toluene diisocyanates	26471-62-5	Grp. 2B: Possible human carc.	International Agency for Research on 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-		No data available; calculated ATE >10 - =20 mg/l
	Vapor(4 hr)		
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Limestone	Dermal	Rat	LD50 > 2,000 mg/kg

Inhalation-	Rat	LC50 3 mg/l
Dust/Mist		
(4 hours)		
Ingestion	Rat	LD50 6,450 mg/kg
Dermal	Rabbit	LD50 > 3,000 mg/kg
Ingestion	Rat	LD50 > 8,000 mg/kg
Dermal	Rabbit	LD50 > 5,000 mg/kg
Inhalation-	Rat	LC50 > 0.691 mg/l
Dust/Mist		
(
0		LD50 > 5,110 mg/kg
Dermal		LD50 15,000 mg/kg
Ingestion	Rat	LD50 11,000 mg/kg
	Mouse	LC50 0.12 mg/l
Dermal	Rabbit	LD50 > 9,400 mg/kg
Inhalation-	Rat	LC50 0.35 mg/l
0		LD50 > 5,000 mg/kg
	Rat	LD50 12,000 mg/kg
	Rat	LC50 30 mg/l
		LD50 5,550 mg/kg
		LD50 3,000 mg/kg
Inhalation-	Rat	LC50 103 mg/l
Vapor (4		
/		
Ingestion		LD50 > 15,000 mg/kg
Dermal	Rabbit	LD50 2,270 mg/kg
Ingestion	Rat	LD50 770 mg/kg
	Dust/Mist (4 hours)IngestionDermalIngestionDermalInhalation- Dust/Mist (4 hours)IngestionDermalIngestionIngestionIngestionInhalation- Vapor (4 hours)IngestionIngestionInhalation- Vapor (4 hours)IngestionIngestionIngestionIngestionIngestionIngestionDermalInhalation- Vapor (4 hours)IngestionDermalInhalation- Vapor (4 hours)IngestionDermalInhalation- Vapor (4 hours)IngestionDermalInhalation- Vapor (4 hours)IngestionDermalInhalation- Vapor (4 hours)IngestionDermalInhalation- Vapor (4 hours)IngestionDermal	Dust/Mist (4 hours)RatIngestionRatDermalRabbitIngestionRatDermalRabbitIngestionRatDermalRabbitInhalation- Dust/Mist (4 hours)RatDermalRabbitIngestionRatDermalRabbitIngestionRatDermalRabbitIngestionRatInhalation- Vapor (4 hours)MouseUrmalRabbitIngestionRatDermalRatIngestionRatDermalRatIngestionRatDermalRatIngestionRatDermalRatIngestionRatDermalRatIngestionRatDermalRabbitIngestionRatDermalRabbitInhalation- Vapor (4 hours)RatDermalRatDermalRabbitInhalation- Vapor (4 hours)RatDermalRatDermalRatDermalRatDermalRatDermalRatDermalRatDermalRatDermalRatDermalRatDermalRatDermalRatDermalRabbit

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Limestone	Rabbit	No significant irritation
Carbon Black	Rabbit	No significant irritation
Fumed Silica	Rabbit	No significant irritation
Carbitol Acetate	Human	Minimal irritation
	and	
	animal	
Toluene Diisocyanate	Rabbit	Irritant
Toluene	Rabbit	Irritant
Heptane	Human	Mild irritant
(Gamma-mercaptopropyl)trimethoxysilane	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Limestone	Rabbit	No significant irritation
Carbon Black	Rabbit	No significant irritation
Fumed Silica	Rabbit	No significant irritation
Carbitol Acetate	Rabbit	Severe irritant
Toluene Diisocyanate	Rabbit	Corrosive
Toluene	Rabbit	Moderate irritant
Heptane	Professio	Moderate irritant
	nal	
	judgeme	
	nt	
(Gamma-mercaptopropyl)trimethoxysilane	Rabbit	No significant irritation

Skin Sensitization

Name	Species	Value
Fumed Silica	Human	Not classified
	and	
	animal	
Carbitol Acetate	Human	Not classified
	and	
	animal	
Toluene Diisocyanate	Human	Sensitizing
	and	
	animal	
Toluene	Guinea	Not classified
	pig	
(Gamma-mercaptopropyl)trimethoxysilane	Guinea	Sensitizing
	pig	

Respiratory Sensitization

Name	Species	Value
Toluene Diisocyanate	Human	Sensitizing

Germ Cell Mutagenicity

Name	Route	Value
Carbon Black	In Vitro	Not mutagenic
Carbon Black	In vivo	Some positive data exist, but the data are not sufficient for classification
Fumed Silica	In Vitro	Not mutagenic
Carbitol Acetate	In Vitro	Not mutagenic
Toluene Diisocyanate	In Vitro	Some positive data exist, but the data are not sufficient for classification
Toluene	In Vitro	Not mutagenic
Toluene	In vivo	Not mutagenic
Heptane	In Vitro	Not mutagenic
(Gamma-mercaptopropyl)trimethoxysilane	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Carbon Black	Dermal	Mouse	Not carcinogenic
Carbon Black	Ingestion	Mouse	Not carcinogenic
Carbon Black	Inhalation	Rat	Carcinogenic
Fumed Silica	Not Specified	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
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

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Limestone	Ingestion	Not classified for development	Rat	NOAEL 625 mg/kg/day	premating & during gestation

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 organogenesi s
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 organogenesi s
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

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Limestone	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.812 mg/l	90 minutes
Carbitol Acetate	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	not applicable
Carbitol Acetate	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not applicable
Toluene Diisocyanate	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	occupational exposure
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
Heptane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Heptane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Heptane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure
						Duration
Limestone	Inhalation	respiratory system	Not classified	Human	NOAEL Not	occupational
					available	exposure
Carbon Black	Inhalation	pneumoconiosis	Not classified	Human	NOAEL Not	occupational
					available	exposure
Fumed Silica	Inhalation	respiratory system	Not classified	Human	NOAEL Not	occupational
		silicosis			available	exposure
Carbitol Acetate	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.48	2 weeks
		liver immune			mg/l	

		system kidney and/or bladder				
Toluene Diisocyanate	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL 0 mg/l	occupational exposure
Toluene	Inhalation	auditory system eyes olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Toluene	Inhalation	nervous system	May cause damage to organs though 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 liver 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 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 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
Heptane	Inhalation	liver nervous system kidney and/or bladder	Not classified	Rat	NOAEL 12 mg/l	26 weeks

Aspiration Hazard

Name	Value
Toluene	Aspiration hazard
Heptane	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

No data 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

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

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

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Health: 2 Flammability: 1 Instability: 1 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Document group:	19-4647-4	Version number:	15.00
Issue Date:	2023/02/28	Supercedes Date:	2022/12/28

The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. The manufacturer MAKES NO WARRANTIES, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF PERFORMANCE, COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. User is responsible for determining whether the product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M Canada SDSs are available at www.3M.ca