



Safety Data Sheet

Copyright, 2020, 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:	16-3561-4	Version number:	17.02
Issue Date:	2020/10/27	Supersedes Date:	2020/01/17

SECTION 1: Identification

1.1. Product identifier

TS-5KVU-3C-3-300, TS-5KVU-3C-350-1000, TS-5KVU-3C-8-4 & TS-5KVU-3C-2/0 KITS

Product Identification Numbers

CE-1006-7341-3	CE-1006-7371-0	CE-1006-9063-1	CE-1006-9064-9	CE-1006-9065-6
CE-1006-9167-0	CE-1007-0215-4	CE-1007-4366-1	CE-1007-4367-9	CE-1007-4368-7

1.2. Recommended use and restrictions on use

Recommended use

Electrical, Custom Electrical Kit

1.3. Supplier's details

Company: 3M Canada Company
Address: 1840 Oxford Street East, Post Office Box 5757, London, Ontario N6A 4T1

Telephone: (800) 364-3577
E Mail:

1.4. Emergency telephone number

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

This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet (SDS) or Article Information Sheet (AIS) for each of these components is included. Please do not separate the component documents from this cover page. The document numbers for components of this product are:

11-0744-0, 40-0153-3, 11-4628-1

Transport in accordance with applicable regulations.

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



Safety Data Sheet

Copyright, 2022, 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:	40-0153-3	Version number:	1.02
Issue Date:	2022/09/21	Supersedes Date:	2021/02/10

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

SECTION 1: Identification

1.1. Product identifier

3M Sheath Wrap Roll

Product Identification Numbers

CE-1006-9128-2	CE-1006-9129-0	UU-0102-5729-1	UU-0102-5730-9	UU-0102-5913-1
UU-0102-5914-9	UU-0102-5915-6	UU-0102-5936-2	UU-0102-5937-0	UU-0102-5938-8
UU-0102-6051-9	UU-0102-6052-7	UU-0112-2563-6		

1.2. Recommended use and restrictions on use

Intended Use

Industrial use

Restrictions on use

Not applicable

1.3. Supplier's details

Company:	3M Canada Company
Division:	Electronics & Energy Business Spons
Address:	1840 Oxford Street East, Post Office Box 5757, London, Ontario N6A 4T1
Telephone:	(800) 364-3577
Website:	www.3M.ca

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

2.1. Classification of the substance or mixture

Respiratory Sensitizer: Category 1.

Skin Sensitizer: Category 1.

Specific Target Organ Toxicity (repeated exposure): Category 1.

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.

Causes damage to organs through prolonged or repeated exposure: respiratory system |

Precautionary statements

Prevention:

Do not breathe dust/fume/gas/mist/vapours/spray. In case of inadequate ventilation wear respiratory protection. Wear protective gloves. Do not eat, drink or smoke when using this product. Wash exposed skin thoroughly after handling. 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. Get medical advice/attention if you feel unwell.

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
Oxide glass chemicals	65997-17-3	40 - 70	Glass, oxide, chemicals
Polymer	Trade Secret	30 - 60	Not Applicable
Iron Oxide (Fe ₃ O ₄)	1317-61-9	1 - 5	Iron oxide (Fe ₃ O ₄)
P,P'-Methylenebis(phenyl isocyanate)	101-68-8	1 - 5 Trade Secret *	Benzene, 1,1'-methylenebis[4-isocyanato-
Diphenylmethane-2,4'-diisocyanate	5873-54-1	0.5 - 1.5 Trade Secret *	Benzene, 1-isocyanato-2-[(4-isocyanatophenyl)methyl]-
CHROMIUM (CR+6)	18540-29-9	0.001 - 0.02	No Data Available

Polymer is a non-hazardous Trade Secret material according to WHMIS criteria.

*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:

No need for first aid is anticipated.

If Swallowed:

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

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

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

4.3. Indication of any immediate medical attention and special treatment required

Not applicable.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

<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

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.

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

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 oxidizing agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities

Store away from strong bases. Store away from oxidizing agents. Store away from amines.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

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

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
P,P'-Methylenebis(phenyl isocyanate)	101-68-8	ACGIH	TWA:0.005 ppm	
CHROMIUM (HEXAVALENT COMPOUNDS)	18540-29-9	ACGIH	TWA(as Cr(IV), inhalable fraction):0.0002 mg/m ³ ;STEL(as Cr(IV), inhalable fraction):0.0005 mg/m ³	
CHROMIUM (VI), WATER SOLUBLE COMPOUNDS	18540-29-9	ACGIH	TWA(as Cr(IV), inhalable fraction):0.0002 mg/m ³ ;TWA(as Cr):0.05 mg/m ³ ;STEL(as Cr(IV), inhalable fraction):0.0005 mg/m ³	Dermal/Respiratory Sensitizer
Chromium(6+), insoluble compounds	18540-29-9	ACGIH	TWA(as Cr):0.01 mg/m ³	
Water-soluble inorganic Cr(6+) compounds	18540-29-9	ACGIH	TWA(as Cr):0.05 mg/m ³	
Oxide glass chemicals	65997-17-3	Manufacturer determined	TWA(as non-fibrous, respirable)(8 hours):3 mg/m ³ ;TWA(as non-fibrous, inhalable fraction)(8 hours):10 mg/m ³	

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

Provide ventilated enclosure for curing. Curing enclosures must be exhausted to outdoors or to a suitable emission control device. 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

None required.

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.

Gloves made from the following material(s) are recommended: Butyl Rubber
Nitrile Rubber

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 – Butyl rubber

Apron – Nitrile

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

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:	Resin Sat.Glass Tape
Colour	Black
Odour	Slight Odour
Odour threshold	<i>Not Applicable</i>
pH	<i>No Data Available</i>
Melting point/Freezing point	<i>Not Applicable</i>
Boiling point	<i>Not Applicable</i>
Flash Point	174.4 °C [Test Method: Closed Cup]
Evaporation rate	<i>Not Applicable</i>
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	<i>No Data Available</i>
Flammable Limits(UEL)	<i>No Data Available</i>
Vapour Pressure	<i>No Data Available</i>
Vapour Density and/or Relative Vapour Density	<i>No Data Available</i>
Density	<i>No Data Available</i>
Relative density	<i>Not Applicable</i>
Water solubility	Nil
Solubility- non-water	Nil [Details: water solubility]
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/Kinematic Viscosity	<i>Not Applicable</i>
Volatile Organic Compounds	<i>No Data Available</i>
Percent volatile	<i>No Data Available</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 polymerization will not occur.

10.4. Conditions to avoid

Sparks and/or flames

10.5. Incompatible materials

Alcohols

Amines

Strong bases

Strong oxidizing agents

10.6. Hazardous decomposition products

Substance

Condition

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:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Allergic Respiratory Reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest. May cause additional health effects (see below).

Skin Contact:

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

Eye Contact:

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

Ingestion:

May be harmful if swallowed. Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

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/or respiratory failure.

Carcinogenicity:

Ingredient	CAS No.	Class Description	Regulation
Chromium Hexavalent Compounds	18540-29-9	Known To Be Human Carcinogen.	National Toxicology Program Carcinogens
Chromium[VI] compounds	18540-29-9	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
Hexavalent chromium compounds	18540-29-9	Cancer hazard	OSHA Carcinogens
Glass Wool Fibers (Inhalable), Certain	65997-17-3	Anticipated human carcinogen	National Toxicology Program Carcinogens

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	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >2,000 - =5,000 mg/kg
Oxide glass chemicals	Dermal		LD50 estimated to be > 5,000 mg/kg
Oxide glass chemicals	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Polymer	Dermal		LD50 estimated to be > 5,000 mg/kg
Polymer	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
P,P'-Methylenebis(phenyl isocyanate)	Dermal	Rabbit	LD50 > 5,000 mg/kg
P,P'-Methylenebis(phenyl isocyanate)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.368 mg/l
P,P'-Methylenebis(phenyl isocyanate)	Ingestion	Rat	LD50 31,600 mg/kg
Iron Oxide (Fe3O4)	Dermal	Not available	LD50 3,100 mg/kg
Iron Oxide (Fe3O4)	Ingestion	Not available	LD50 3,700 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
CHROMIUM (CR+6)	Dermal		LD50 estimated to be 200 - 1,000 mg/kg
CHROMIUM (CR+6)	Inhalation-Dust/Mist		LC50 estimated to be 0 - 0.05 mg/l
CHROMIUM (CR+6)	Ingestion		LD50 estimated to be 5 - 50 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

3M Sheath Wrap Roll

Name	Species	Value
Oxide glass chemicals	Professional judgement	No significant irritation
P,P'-Methylenebis(phenyl isocyanate)	official classification	Irritant
Iron Oxide (FE3O4)	Rabbit	No significant irritation
Diphenylmethane-2,4'-diisocyanate	official classification	Irritant
CHROMIUM (CR+6)	Human	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
Oxide glass chemicals	Professional judgement	No significant irritation
P,P'-Methylenebis(phenyl isocyanate)	official classification	Severe irritant
Iron Oxide (FE3O4)	Rabbit	No significant irritation
Diphenylmethane-2,4'-diisocyanate	official classification	Severe irritant
CHROMIUM (CR+6)	similar health hazards	Corrosive

Skin Sensitization

Name	Species	Value
P,P'-Methylenebis(phenyl isocyanate)	official classification	Sensitizing
Iron Oxide (FE3O4)	Human	Not classified
Diphenylmethane-2,4'-diisocyanate	official classification	Sensitizing
CHROMIUM (CR+6)	Human and animal	Sensitizing

Respiratory Sensitization

Name	Species	Value
P,P'-Methylenebis(phenyl isocyanate)	Human	Sensitizing
Diphenylmethane-2,4'-diisocyanate	Human	Sensitizing
CHROMIUM (CR+6)	Human	Not classified

Germ Cell Mutagenicity

Name	Route	Value
Oxide glass chemicals	In Vitro	Some positive data exist, but the data are not sufficient for classification
P,P'-Methylenebis(phenyl isocyanate)	In Vitro	Some positive data exist, but the data are not sufficient for classification
Iron Oxide (FE3O4)	In Vitro	Not mutagenic
Diphenylmethane-2,4'-diisocyanate	In Vitro	Some positive data exist, but the data are not sufficient for classification
CHROMIUM (CR+6)	In Vitro	Some positive data exist, but the data are not

		sufficient for classification
CHROMIUM (CR+6)	In vivo	Mutagenic

Carcinogenicity

Name	Route	Species	Value
Oxide glass chemicals	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
P,P'-Methylenebis(phenyl isocyanate)	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Iron Oxide (Fe ₃ O ₄)	Inhalation	Human	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
CHROMIUM (CR+6)	Not Specified	Human	Carcinogenic

Reproductive Toxicity**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	Exposure Duration
P,P'-Methylenebis(phenyl isocyanate)	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
CHROMIUM (CR+6)	Inhalation	Not classified for female reproduction	Rat	NOAEL 0.0002 mg/l	3 generation
CHROMIUM (CR+6)	Inhalation	Not classified for male reproduction	Rat	NOAEL 0.0002 mg/l	3 generation
CHROMIUM (CR+6)	Inhalation	Not classified for development	Rat	NOAEL 0.0002 mg/l	3 generation
CHROMIUM (CR+6)	Ingestion	Toxic to female reproduction	Mouse	LOAEL 6 mg/kg/day	12 weeks
CHROMIUM (CR+6)	Ingestion	Toxic to male reproduction	Mouse	LOAEL 6 mg/kg/day	12 weeks
CHROMIUM (CR+6)	Ingestion	Toxic to development	Mouse	LOAEL 57 mg/kg/day	during gestation

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

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
P,P'-Methylenebis(phenyl isocyanate)	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	
CHROMIUM (CR+6)	Dermal	kidney and/or bladder	Not classified	Human	NOAEL Not available	
CHROMIUM (CR+6)	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	occupational exposure
CHROMIUM (CR+6)	Ingestion	kidney and/or bladder	Causes damage to organs	Human	NOAEL Not available	
CHROMIUM (CR+6)	Ingestion	hematopoietic system liver	Not classified	Human	NOAEL Not available	
CHROMIUM (CR+6)	Ingestion	nervous system	Not classified	Human	NOAEL Not available	poisoning and/or abuse

Specific Target Organ Toxicity - repeated exposure

3M Sheath Wrap Roll

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Oxide glass chemicals	Inhalation	respiratory system	Not classified	Human	NOAEL not available	occupational exposure
P,P'-Methylenebis(phenyl isocyanate)	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks
Iron Oxide (Fe ₃ O ₄)	Inhalation	pulmonary fibrosis pneumoconiosis	Not classified	Human	NOAEL Not available	occupational exposure
Diphenylmethane-2,4'-diisocyanate	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks
CHROMIUM (CR+6)	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
CHROMIUM (CR+6)	Inhalation	immune system	Not classified	Rat	NOAEL Not available	90 days
CHROMIUM (CR+6)	Inhalation	heart endocrine system hematopoietic system liver nervous system kidney and/or bladder	Not classified	Rat	NOAEL 0.02 mg/l	2 years
CHROMIUM (CR+6)	Ingestion	kidney and/or bladder	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 100 mg/kg/day	28 days
CHROMIUM (CR+6)	Ingestion	nervous system	Not classified	Rat	LOAEL 98 mg/kg/day	28 days
CHROMIUM (CR+6)	Ingestion	liver	Not classified	Multiple animal species	NOAEL Not available	
CHROMIUM (CR+6)	Ingestion	hematopoietic system	Not classified	Mouse	NOAEL Not available	1 generation

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

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 completely cured (or polymerized) material in a permitted industrial waste facility. 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.

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: 0 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:	40-0153-3	Version number:	1.02
Issue Date:	2022/09/21	Supersedes Date:	2021/02/10

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



Article Information Sheet

Copyright, 2025, 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.

This Article Information Sheet is provided as a courtesy in response to a customer request. A Safety Data Sheet (SDS) has not been prepared for these product(s) because they are articles. Articles are not subject to the Hazardous Products Act or Regulations. As defined in the act: "Article" means any article that is formed to a specific shape or design during manufacture, the intended use of which when in that form is dependent in whole or in part on its shape or design, and that, when being installed, if the intended use of the article requires it to be installed, and under normal conditions of use, will not release or otherwise cause an individual to be exposed to a hazardous product.

Document group:	11-0744-0	Version number:	3.00
Issue Date:	2025/04/28	Supersedes Date:	2023/05/26

SECTION 1: Identification

1.1. Product identifier

Scotch® Rubber Mastic Tape 2228

1.2. Recommended use and restrictions on use

Intended Use

Electrical tape.

Restrictions on use

Not applicable

1.3. Supplier's details

Company:	3M Canada Company
Division:	Electrical Markets Division
Address:	1840 Oxford Street East, Post Office Box 5757, London, Ontario N6A 4T1
Telephone:	(800) 364-3577
Website:	www.3M.ca

1.4. Emergency telephone number

Medical Emergency Telephone: 1-800-3M HELPS / 1800 364 3577

SECTION 2: Hazard identification

This product is exempt from hazard classification according to the Hazardous Products Act because it meets the manufactured article exemption.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt	Common Name
Polyolefin	Mixture	40 - 85	Not Applicable

Inorganic fillers	Mixture	35 - 70	Not Applicable
Carbon Black	1333-86-4	1 - 10	Carbon black
DISTILLATES (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE	152698-66-3	1 - 7	Distillates (petroleum), C3-6, piperylene-rich, polymers with isobutylene
Asphalt	8052-42-4	1 - 4	Asphalt
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)	64742-01-4	1 - 4	Residual oils, petroleum, solvent-refined fraction from solvent refining of a residuum using a polar organic solvent such as phenol or furfural. It consists of hydrocarbons having carbon numbers predominantly higher than C25 and boiling above approximately 400 °C (752 °F).
Zinc Stearate	557-05-1	0 - 1	Octadecanoic acid, zinc salt
Quartz Silica	14808-60-7	0 - 0.5	Quartz (SiO ₂)

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

No need for first aid is anticipated.

Skin Contact:

No need for first aid is anticipated.

Eye Contact:

No need for first aid is anticipated.

If Swallowed:

No need for first aid is anticipated.

SECTION 5: Fire-fighting measures

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Not applicable.

6.2. Environmental precautions

Not applicable.

6.3. Methods and material for containment and cleaning up

Not applicable.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical

under normal use conditions.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

SECTION 8: Exposure controls/personal protection

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions. No engineering controls or personal protective equipment (PPE) are necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Specific Physical Form:	Roll of Tape
Colour	Black
Odour	Mild Rubber
Odour threshold	<i>Not Applicable</i>
pH	<i>Not Applicable</i>
Melting point/Freezing point	<i>No Data Available</i>
Boiling point	<i>Not Applicable</i>
Flash Point	No flash point
Evaporation rate	<i>Not Applicable</i>
Flammability	Not Applicable
Flammable Limits(LEL)	<i>Not Applicable</i>
Flammable Limits(UEL)	<i>Not Applicable</i>
Vapour Pressure	<i>Not Applicable</i>
Relative Vapour Density	<i>Not Applicable</i>
Density	<i>No Data Available</i>
Relative density	Approximately 1.1 [Ref Std: WATER=1]
Water solubility	[Details: CONDITIONS: Nil] <i>No Data Available</i>
Solubility- non-water	<i>Not Applicable</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	<i>No Data Available</i>
Decomposition temperature	<i>Not Applicable</i>
Kinematic Viscosity	<i>Not Applicable</i>
Volatile Organic Compounds	<i>No Data Available</i>
Percent volatile	<i>No Data Available</i>
VOC Less H2O & Exempt Solvents	<i>No Data Available</i>

Particle Characteristics	<i>Not Applicable</i>
--------------------------	-----------------------

SECTION 10: Stability and reactivity

This material is considered to be non reactive under normal use conditions.

SECTION 11: Toxicological information

Inhalation:

No health effects are expected

Skin Contact:

No health effects are expected

Eye Contact:

No health effects are expected

Ingestion:

No health effects are expected

Additional Information:

This product, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

SECTION 12: Ecological information

No data available.

SECTION 13: Disposal considerations

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

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

This product is an article as defined by CEPA and is exempt from DSL inventory listing.

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: 0 Flammability: 1 Instability: 0 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.

HMIS Hazard Classification

Health: 0 Flammability: 1 Physical Hazard: 0 Personal Protection: A

Hazardous Material Identification System (HMIS® IV) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).

Document group:	11-0744-0	Version number:	3.00
Issue Date:	2025/04/28	Supersedes Date:	2023/05/26

Reason for Reissue

Conversion to GHS format SDS.

The information in this Article Information Sheet (AIS) 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



Safety Data Sheet

Copyright, 2025, 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:	11-4628-1	Version number:	20.00
Issue Date:	2025/04/29	Supersedes Date:	2023/05/08

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

SECTION 1: Identification

1.1. Product identifier

3M™ Cable Preparation Kit CC-3 (Bag)

1.2. Recommended use and restrictions on use

Intended Use

Electrical

Specific Use

Solvent soaked pads for cleaning cable.

Restrictions on use

Not applicable

1.3. Supplier's details

Company:	3M Canada Company
Division:	Electrical Markets Division
Address:	1840 Oxford Street East, Post Office Box 5757, London, Ontario N6A 4T1
Telephone:	(800) 364-3577
Website:	www.3M.ca

1.4. Emergency telephone number

Medical Emergency Telephone: 1-800-3M HELPS / 1800 364 3577

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Flammable Liquid: Category 4.

Skin Corrosion/Irritation: Category 2.

Skin Sensitizer: Category 1B.

2.2. Label elements

Signal word

Warning

Symbols

Exclamation mark |

Pictograms



Hazard Statements

Combustible Liquid

Causes skin irritation. May cause an allergic skin reaction.

Precautionary statements

Prevention:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid breathing vapours. Wash exposed skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, eye protection, and face protection.

Response:

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Storage:

Store in a well-ventilated place.

Disposal:

Dispose of contents and container in accordance with applicable local, regional, national, and 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
HYDROTREATED HEAVY NAPHTHA (PETROLEUM)	64742-48-9	50 - 70	Naphtha, petroleum, hydrotreated heavy
Cotton Pads	None	25 - 40	Not Applicable
D-LIMONENE	5989-27-5	5 - 20	Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (R)-

Cotton Pads is a non-hazardous material according to WHMIS criteria. Specific information 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:

If exposed, flush eyes with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms develop, 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 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 fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Unsuitable extinguishing media

None Determined

5.3. Special hazards arising from the substance or mixture

None inherent in this product.

5.4. Special protection actions for fire-fighters

Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA). Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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. Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. 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. Warning! A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode.

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 using non-sparking tools. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial or professional use only. Not for consumer sale or use. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Avoid breathing 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. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Store away from acids. Store away from oxidizing agents.

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
D-LIMONENE	5989-27-5	AIHA	TWA:165.5 mg/m3(30 ppm)	

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

None required.

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: Nitrile Rubber

Polyvinyl Alcohol (PVA)

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 – Nitrile

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 vapors

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 (Lint-free cloths soaked with liquid)
Specific Physical Form:	Cloth pads soaked in liquid in can or bag
Colour	White
Odour	Moderate Citrus
Odour threshold	<i>No Data Available</i>
pH	7
Melting point/Freezing point	<i>No Data Available</i>
Boiling point	193.3 °C - 248.9 °C
Flash Point	62.2 °C [Test Method: Closed Cup]
Evaporation rate	<i>No Data Available</i>
Flammability	Flammable Liquid: Category 4.
Flammable Limits(LEL)	<i>No Data Available</i>
Flammable Limits(UEL)	<i>No Data Available</i>
Vapour Pressure	< 133.3 Pa [@ 25 °C]
Relative Vapour Density	> 1 [Ref Std: AIR=1]
Density	0.76 g/ml
Relative density	0.76 [Ref Std: WATER=1]
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>
Kinematic Viscosity	2 mm ² /sec
Volatile Organic Compounds	Approximately 740 %
Percent volatile	<i>No Data Available</i>
VOC Less H₂O & Exempt Solvents	760 g/l
Molecular weight	<i>No Data Available</i>

Particle Characteristics	<i>Not Applicable</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 polymerization will not occur.

10.4. Conditions to avoid

Sparks and/or flames

10.5. Incompatible materials

Strong oxidizing agents

10.6. Hazardous decomposition products**Substance**

Carbon monoxide

Carbon dioxide

Condition

Not Specified

Not Specified

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 regulatory 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:

No health effects are expected.

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:

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

Ingestion:

Physical Blockage: Signs/symptoms may include cramping, abdominal pain, and constipation. Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

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 >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
HYDROTREATED HEAVY NAPHTHA (PETROLEUM)	Dermal	similar compounds	LD50 > 2,200 mg/kg
HYDROTREATED HEAVY NAPHTHA (PETROLEUM)	Ingestion	similar compounds	LD50 > 15,000 mg/kg
D-LIMONENE	Inhalation-Vapor (4 hours)	Mouse	LC50 > 3.14 mg/l
D-LIMONENE	Dermal	Rabbit	LD50 > 5,000 mg/kg

D-LIMONENE	Ingestion	Rat	LD50 4,400 mg/kg
------------	-----------	-----	------------------

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
HYDROTREATED HEAVY NAPHTHA (PETROLEUM)	similar compounds	Mild irritant
D-LIMONENE	Rabbit	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
HYDROTREATED HEAVY NAPHTHA (PETROLEUM)	similar compounds	No significant irritation
D-LIMONENE	Rabbit	Mild irritant

Skin Sensitization

Name	Species	Value
HYDROTREATED HEAVY NAPHTHA (PETROLEUM)	similar compounds	Not classified
D-LIMONENE	Mouse	Sensitizing

Respiratory Sensitization

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

Germ Cell Mutagenicity

Name	Route	Value
HYDROTREATED HEAVY NAPHTHA (PETROLEUM)	In Vitro	Not mutagenic
D-LIMONENE	In Vitro	Not mutagenic
D-LIMONENE	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
D-LIMONENE	Ingestion	Rat	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
D-LIMONENE	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	premating & during gestation
D-LIMONENE	Ingestion	Not classified for development	Multiple animal species	NOAEL 591 mg/kg/day	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
HYDROTREATED HEAVY NAPHTHA (PETROLEUM)	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	

D-LIMONENE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
D-LIMONENE	Ingestion	nervous system	Not classified		NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
D-LIMONENE	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 75 mg/kg/day	103 weeks
D-LIMONENE	Ingestion	liver	Not classified	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
D-LIMONENE	Ingestion	heart endocrine system bone, teeth, nails, and/or hair hematopoietic system immune system muscles nervous system respiratory system	Not classified	Rat	NOAEL 600 mg/kg/day	103 weeks

Aspiration Hazard

Name	Value
HYDROTREATED HEAVY NAPHTHA (PETROLEUM)	Aspiration hazard
D-LIMONENE	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.

Incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. As a disposal alternative, utilize an acceptable permitted waste disposal facility. 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 the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional 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: 2 Instability: 0 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.

HMIS Hazard Classification

Health: 2 Flammability: 2 Physical Hazard: 0 Personal Protection: X - See PPE section.

Hazardous Material Identification System (HMIS® IV) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).

Document group:	11-4628-1	Version number:	20.00
Issue Date:	2025/04/29	Supersedes Date:	2023/05/08

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