Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier
3M Scotchkote Intumescent Coating LS4000, Clear (Part A)

Product Identification Numbers

1.2. Recommended use and restrictions on use

Recommended use
Coating, Clear intumescent coating for wood.

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	3M United Kingdom Infrastructure Protection Division
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number
1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

2.1. Hazard classification
Carcinogenicity: Category 1A.
Reproductive Toxicity: Category 2.
Specific Target Organ Toxicity (single exposure): Category 1.
Skin Sensitizer: Category 1A.

2.2. Label elements
Signal word
Danger

Symbols
Exclamation mark | Health Hazard |

Pictograms

Hazard Statements
May cause an allergic skin reaction.
Suspected of damaging fertility or the unborn child.
May cause cancer.

Causes damage to organs:
sensory organs |

Precautionary Statements

Prevention:
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/fume/gas/mist/vapors/spray.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Wear protective gloves.
Do not eat, drink or smoke when using this product.
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.

Response:
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.
IF exposed: Call a POISON CENTER or doctor/physician.
IF exposed or concerned: Get medical advice/attention.
Specific treatment (see Notes to Physician on this label).

Storage:
Store locked up.

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

2.3. Hazards not otherwise classified
May cause an allergic respiratory reaction in sensitive people.

27% of the mixture consists of ingredients of unknown acute oral toxicity.
27% of the mixture consists of ingredients of unknown acute dermal toxicity.
72% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
METHYLATED MELAMINE-FORMALDEHYDE POLYMER	68002-20-0	30 - 60 Trade Secret *
UREA, POLYMER WITH FORMALDEHYDE, METHYLATED	68071-45-4	10 - 30 Trade Secret *
NON-HAZARDOUS MATERIALS	Mixture	10 - 30 Trade Secret *

ZIRCONIUM OXIDE	1314-23-4	1 - 5 Trade Secret *
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	112945-52-5	1 - 5 Trade Secret *
METHYL ALCOHOL	67-56-1	1 - 5 Trade Secret *
FORMALDEHYDE	50-00-0	< 1 Trade Secret *
2,4,7,9-TETRAMETHYL-5-DECYNE-4,7-DIOL	126-86-3	< 1 Trade Secret *
HYDROTREATED HEAVY PARAFFINIC DISTILLATE (PETROLEUM)	64742-54-7	< 1 Trade Secret *
1,2-BENZISOTHIAZOLIN-3-ONE	2634-33-5	< 0.1 Trade Secret *

*The specific chemical identity and/or exact percentage (concentration) of this composition 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:
Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately 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
See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required
This product contains methanol. Methanol poisoning can cause metabolic acidosis, blindness, and death. Onset of signs or symptoms may be delayed for 18 to 24 hours. If methanol poisoning is confirmed, intravenous (IV) administration of ethanol should be considered. Additional pharmacologic and supportive care should be based on the treating physician's judgement.

Not applicable

SECTION 5: Fire-fighting measures

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

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

Hazardous Decomposition or By-Products

Substance	Condition
Formaldehyde	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

Hydrogen Fluoride	During Combustion

5.3. Special protective actions for fire-fighters
When fire fighting conditions are severe and total thermal decomposition of the product is possible, 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
Ventilate the area with fresh air. 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
Contain spill. 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 closed container approved for transportation by appropriate authorities. Clean up residue with water. Seal the container. Dispose of collected material as soon as possible.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
For industrial or professional use only. 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. Wash contaminated clothing before reuse. Use personal protective equipment (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities
Store away from heat. Store away from acids.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
SILICA, AMORPHOUS	112945-52-5	US Dept of Labor - OSHA	TWA concentration:0.8 mg/m3;TWA:20 millions of particles/cu. ft.	
ZIRCONIUM COMPOUNDS	1314-23-4	Amer Conf of Gov. Indust. Hyg.	TWA(as Zr):5 mg/m3;STEL(as Zr):10 mg/m3	
ZIRCONIUM COMPOUNDS	1314-23-4	US Dept of Labor - OSHA	TWA(as Zr):5 mg/m3	
FORMALDEHYDE	50-00-0	Amer Conf of Gov. Indust. Hyg.	CEIL:0.3 ppm	Sensitizer
FORMALDEHYDE	50-00-0	Chemical	TWA:0.5 ppm	

FORMALDEHYDE	50-00-0	Manufacturer Rec Guid US Dept of Labor - OSHA	TWA:0.75 ppm;STEL:2 ppm	29 CFR 1910.1048
METHYL ALCOHOL	67-56-1	Amer Conf of Gov. Indust. Hyg.	TWA:200 ppm;STEL:250 ppm	Skin Notation
METHYL ALCOHOL	67-56-1	US Dept of Labor - OSHA	TWA:260 mg/m3(200 ppm)	

Amer Conf of Gov. Indust. Hyg. : American Conference of Governmental Industrial Hygienists
American Indust. Hygiene Assoc : American Industrial Hygiene Association
Chemical Manufacturer Rec Guid : Chemical Manufacturer's Recommended Guidelines
US Dept of Labor - OSHA : United States Department of Labor - Occupational Safety and Health Administration
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:
Indirect Vented Goggles

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

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

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:
Full facepiece air-purifying respirator suitable for formaldehyde

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

General Physical Form:	Liquid
Specific Physical Form:	Liquid
Odor, Color, Grade:	Faint acrylic odor; Clear white color

Odor threshold	*No Data Available*
pH	8
Melting point	*Not Applicable*
Boiling Point	>=100 ºC
Flash Point	*Not Applicable*
Evaporation rate	*No Data Available*
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	*Not Applicable*
Flammable Limits(UEL)	*Not Applicable*
Vapor Pressure	*No Data Available*
Vapor Density	*No Data Available*
Density	1.200 g/ml
Specific Gravity	1.200 [*Ref Std:* WATER=1]
Solubility In Water	100 %
Solubility- non-water	*No Data Available*
Partition coefficient: n-octanol/ water	*No Data Available*
Autoignition temperature	*Not Applicable*
Decomposition temperature	*No Data Available*
Viscosity	*No Data Available*
Volatile Organic Compounds	20 g/l [*Test Method:* Estimated] [*Details:* EU definition (Part A and B mix)]
Percent volatile	32.83 % weight

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
Temperatures above the boiling point

10.5. Incompatible materials
Strong acids

10.6. Hazardous decomposition products

Substance	Condition
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

Extreme heat arising from situations such as misuse or equipment failure can generate hydrogen fluoride as a decomposition product.

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 in sensitive people: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest.

May cause target organ effects after inhalation.

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. Vapors released during curing may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion:
Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause target organ effects after ingestion.

Target Organ Effects:

Single exposure may cause:
May cause blindness.

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	C.A.S. No.	Class Description	Regulation
FORMALDEHYDE	50-00-0	Cancer hazard	OSHA Carcinogens
FORMALDEHYDE	50-00-0	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
FORMALDEHYDE	50-00-0	Known human carcinogen	National Toxicology Program Carcinogens

Toxicological Data

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		Data not available or insufficient for classification; calculated ATE > 5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		Data not available or insufficient for classification; calculated ATE > 50 mg/l
Overall product	Ingestion		Data not available or insufficient for classification; calculated ATE > 5,000 mg/kg
METHYLATED MELAMINE-FORMALDEHYDE POLYMER	Dermal	Rabbit	LD50 > 5,000 mg/kg
METHYLATED MELAMINE-FORMALDEHYDE POLYMER	Ingestion	Rat	LD50 5,400 mg/kg
UREA, POLYMER WITH FORMALDEHYDE, METHYLATED			Data not available or insufficient for classification
METHYL ALCOHOL	Dermal		LD50 estimated to be 1,000 - 2,000 mg/kg
METHYL ALCOHOL	Inhalation-Vapor		LC50 estimated to be 10 - 20 mg/l
METHYL ALCOHOL	Ingestion		LD50 estimated to be 50 - 300 mg/kg
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Dermal	Rabbit	LD50 > 5,000 mg/kg
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Ingestion	Rat	LD50 > 5,110 mg/kg
ZIRCONIUM OXIDE			Data not available or insufficient for classification
FORMALDEHYDE	Dermal	Rabbit	LD50 270 mg/kg
FORMALDEHYDE	Inhalation-Gas (4 hours)	Rat	LC50 470 ppm
FORMALDEHYDE	Ingestion	Rat	LD50 800 mg/kg
HYDROTREATED HEAVY PARAFFINIC DISTILLATE (PETROLEUM)	Dermal	Rabbit	LD50 > 5,000 mg/kg
HYDROTREATED HEAVY PARAFFINIC DISTILLATE (PETROLEUM)	Ingestion	Rat	LD50 > 5,000 mg/kg
2,4,7,9-TETRAMETHYL-5-DECYNE-4,7-DIOL	Dermal	Rat	LD50 > 2,000 mg/kg
2,4,7,9-TETRAMETHYL-5-DECYNE-4,7-DIOL	Ingestion	Rat	LD50 > 500 mg/kg
1,2-BENZISOTHIAZOLIN-3-ONE			Data not available or insufficient for classification

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
METHYLATED MELAMINE-FORMALDEHYDE POLYMER		Data not available or insufficient for classification
UREA, POLYMER WITH FORMALDEHYDE, METHYLATED		Data not available or insufficient for classification
METHYL ALCOHOL	Rabbit	Mild irritant
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Rabbit	No significant irritation
ZIRCONIUM OXIDE		Data not available or insufficient for classification
FORMALDEHYDE	official classification	Corrosive
HYDROTREATED HEAVY PARAFFINIC DISTILLATE (PETROLEUM)	Rabbit	Minimal irritation
2,4,7,9-TETRAMETHYL-5-DECYNE-4,7-DIOL	Rabbit	No significant irritation
1,2-BENZISOTHIAZOLIN-3-ONE		Data not available or insufficient for classification

Serious Eye Damage/Irritation

Name	Species	Value
METHYLATED MELAMINE-FORMALDEHYDE POLYMER		Data not available or insufficient for classification
UREA, POLYMER WITH FORMALDEHYDE, METHYLATED		Data not available or insufficient for classification
METHYL ALCOHOL	Rabbit	Moderate irritant
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Rabbit	No significant irritation
ZIRCONIUM OXIDE		Data not available or insufficient for classification
FORMALDEHYDE	official classification	Corrosive
HYDROTREATED HEAVY PARAFFINIC DISTILLATE (PETROLEUM)	Rabbit	Mild irritant
2,4,7,9-TETRAMETHYL-5-DECYNE-4,7-DIOL	Rabbit	Corrosive
1,2-BENZISOTHIAZOLIN-3-ONE		Data not available or insufficient for classification

Skin Sensitization

Name	Species	Value
METHYLATED MELAMINE-FORMALDEHYDE POLYMER		Data not available or insufficient for classification
UREA, POLYMER WITH FORMALDEHYDE, METHYLATED		Data not available or insufficient for classification
METHYL ALCOHOL	Guinea pig	Not sensitizing
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Human and animal	Not sensitizing
ZIRCONIUM OXIDE		Data not available or insufficient for classification
FORMALDEHYDE	Guinea pig	Sensitizing
HYDROTREATED HEAVY PARAFFINIC DISTILLATE (PETROLEUM)	Guinea pig	Not sensitizing
2,4,7,9-TETRAMETHYL-5-DECYNE-4,7-DIOL	Mouse	Sensitizing
1,2-BENZISOTHIAZOLIN-3-ONE		Data not available or insufficient for classification

Respiratory Sensitization

Name	Species	Value
METHYLATED MELAMINE-FORMALDEHYDE POLYMER		Data not available or insufficient for classification
UREA, POLYMER WITH FORMALDEHYDE, METHYLATED		Data not available or insufficient for classification
METHYL ALCOHOL		Data not available or insufficient for classification
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE		Data not available or insufficient for classification
ZIRCONIUM OXIDE		Data not available or insufficient for classification
FORMALDEHYDE	Human	Some positive data exist, but the data are not sufficient for classification
HYDROTREATED HEAVY PARAFFINIC DISTILLATE (PETROLEUM)		Data not available or insufficient for classification
2,4,7,9-TETRAMETHYL-5-DECYNE-4,7-DIOL		Data not available or insufficient for classification
1,2-BENZISOTHIAZOLIN-3-ONE		Data not available or insufficient for classification

Germ Cell Mutagenicity

Name	Route	Value
METHYLATED MELAMINE-FORMALDEHYDE POLYMER		Data not available or insufficient for classification
UREA, POLYMER WITH FORMALDEHYDE, METHYLATED		Data not available or insufficient for classification
METHYL ALCOHOL	In Vitro	Some positive data exist, but the data are not sufficient for classification
METHYL ALCOHOL	In vivo	Some positive data exist, but the data are not sufficient for classification
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	In Vitro	Not mutagenic
ZIRCONIUM OXIDE		Data not available or insufficient for classification
FORMALDEHYDE	In Vitro	Some positive data exist, but the data are not sufficient for classification
FORMALDEHYDE	In vivo	Mutagenic
HYDROTREATED HEAVY PARAFFINIC DISTILLATE (PETROLEUM)	In Vitro	Some positive data exist, but the data are not sufficient for classification
2,4,7,9-TETRAMETHYL-5-DECYNE-4,7-DIOL		Data not available or insufficient for classification
1,2-BENZISOTHIAZOLIN-3-ONE		Data not available or insufficient for classification

Carcinogenicity

Name	Route	Species	Value
METHYLATED MELAMINE-FORMALDEHYDE POLYMER			Data not available or insufficient for classification
UREA, POLYMER WITH FORMALDEHYDE, METHYLATED			Data not available or insufficient for classification
METHYL ALCOHOL	Inhalation	Multiple animal species	Not carcinogenic
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification
ZIRCONIUM OXIDE			Data not available or insufficient for classification
FORMALDEHYDE	Not Specified	Human and animal	Carcinogenic
HYDROTREATED HEAVY PARAFFINIC DISTILLATE (PETROLEUM)	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
2,4,7,9-TETRAMETHYL-5-DECYNE-4,7-DIOL			Data not available or insufficient for classification

1,2-BENZISOTHIAZOLIN-3-ONE			Data not available or insufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
METHYLATED MELAMINE-FORMALDEHYDE POLYMER		Data not available or insufficient for classification			
UREA, POLYMER WITH FORMALDEHYDE, METHYLATED		Data not available or insufficient for classification			
METHYL ALCOHOL	Ingestion	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,600 mg/kg/day	21 days
METHYL ALCOHOL	Ingestion	Toxic to development	Mouse	LOAEL 4,000 mg/kg/day	during organogenesis
METHYL ALCOHOL	Inhalation	Toxic to development	Mouse	NOAEL 1.3 mg/l	during organogenesis
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Ingestion	Not toxic to development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
ZIRCONIUM OXIDE		Data not available or insufficient for classification			
FORMALDEHYDE	Ingestion	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 100 mg/kg	not applicable
FORMALDEHYDE	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 10 ppm	during gestation
HYDROTREATED HEAVY PARAFFINIC DISTILLATE (PETROLEUM)		Data not available or insufficient for classification			
2,4,7,9-TETRAMETHYL-5-DECYNE-4,7-DIOL		Data not available or insufficient for classification			
1,2-BENZISOTHIAZOLIN-3-ONE		Data not available or insufficient for classification			

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
METHYLATED MELAMINE-FORMALDEHYDE POLYMER			Data not available or insufficient for classification			
UREA, POLYMER WITH FORMALDEHYDE, METHYLATED			Data not available or insufficient for classification			
METHYL ALCOHOL	Inhalation	blindness	Causes damage to organs	Human	NOAEL Not available	occupational exposure
METHYL ALCOHOL	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	not available
METHYL ALCOHOL	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	6 hours
METHYL ALCOHOL	Ingestion	blindness	Causes damage to organs	Human	NOAEL Not available	poisoning and/or abuse
METHYL ALCOHOL	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse

SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE			Data not available or insufficient for classification			
ZIRCONIUM OXIDE			Data not available or insufficient for classification			
FORMALDEHYDE	Inhalation	respiratory system	Causes damage to organs	Rat	LOAEL 128 ppm	6 hours
FORMALDEHYDE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
HYDROTREATED HEAVY PARAFFINIC DISTILLATE (PETROLEUM)	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
2,4,7,9-TETRAMETHYL-5-DECYNE-4,7-DIOL			Data not available or insufficient for classification			
1,2-BENZISOTHIAZOLIN-3-ONE			Data not available or insufficient for classification			

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
METHYLATED MELAMINE-FORMALDEHYDE POLYMER			Data not available or insufficient for classification			
UREA, POLYMER WITH FORMALDEHYDE, METHYLATED			Data not available or insufficient for classification			
METHYL ALCOHOL	Inhalation	liver	All data are negative	Rat	NOAEL 6.55 mg/l	4 weeks
METHYL ALCOHOL	Inhalation	respiratory system	All data are negative	Rat	NOAEL 13.1 mg/l	6 weeks
METHYL ALCOHOL	Ingestion	liver | nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,500 mg/kg/day	90 days
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Inhalation	respiratory system | silicosis	All data are negative	Human	NOAEL Not available	occupational exposure
ZIRCONIUM OXIDE			Data not available or insufficient for classification			
FORMALDEHYDE	Dermal	respiratory system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 80 mg/kg/day	60 weeks
FORMALDEHYDE	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	NOAEL 0.3 ppm	28 months
FORMALDEHYDE	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 20 ppm	13 weeks
FORMALDEHYDE	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 15 ppm	3 weeks
FORMALDEHYDE	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 10 ppm	13 weeks
FORMALDEHYDE	Inhalation	endocrine system | immune system | muscles | kidney and/or bladder	All data are negative	Rat	NOAEL 15 ppm	28 months
FORMALDEHYDE	Inhalation	eyes | vascular system	All data are negative	Rat	NOAEL 14.3 ppm	2 years
FORMALDEHYDE	Inhalation	heart	All data are negative	Mouse	NOAEL 14.3 ppm	2 years

FORMALDEHYDE	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 300 mg/kg/day	2 years
FORMALDEHYDE	Ingestion	immune system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 20 mg/kg/day	4 weeks
FORMALDEHYDE	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 15 mg/kg/day	24 months
FORMALDEHYDE	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 109 mg/kg/day	2 years
FORMALDEHYDE	Ingestion	heart | endocrine system | hematopoietic system | respiratory system | vascular system	All data are negative	Rat	NOAEL 300 mg/kg/day	2 years
FORMALDEHYDE	Ingestion	skin | muscles | eyes	All data are negative	Rat	NOAEL 109 mg/kg/day	2 years
HYDROTREATED HEAVY PARAFFINIC DISTILLATE (PETROLEUM)	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.21 mg/l	28 days
2,4,7,9-TETRAMETHYL-5-DECYNE-4,7-DIOL			Data not available or insufficient for classification			
1,2-BENZISOTHIAZOLIN-3-ONE			Data not available or insufficient for classification			

Aspiration Hazard

Name	Value
METHYLATED MELAMINE-FORMALDEHYDE POLYMER	Not an aspiration hazard
UREA, POLYMER WITH FORMALDEHYDE, METHYLATED	Not an aspiration hazard
METHYL ALCOHOL	Not an aspiration hazard
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	Not an aspiration hazard
ZIRCONIUM OXIDE	Not an aspiration hazard
FORMALDEHYDE	Not an aspiration hazard
HYDROTREATED HEAVY PARAFFINIC DISTILLATE (PETROLEUM)	Not an aspiration hazard
2,4,7,9-TETRAMETHYL-5-DECYNE-4,7-DIOL	Not an aspiration hazard
1,2-BENZISOTHIAZOLIN-3-ONE	Not an 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

Ecotoxicological information

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

Chemical fate information

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

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative,

incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. If no other disposal options are available, waste product that has been completely cured or polymerized may be placed in a landfill properly designed for industrial waste. 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.

EPA Hazardous Waste Number (RCRA): Not regulated

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. US Federal Regulations

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

Ingredient	C.A.S. No	% by Wt
METHYL ALCOHOL	67-56-1	Trade Secret 1 - 5
FORMALDEHYDE	50-00-0	Trade Secret < 1

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification
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.

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