

Safety Data Sheet

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Document Group:	44-2832-2	Version Number:	1.00
Issue Date:	07/17/23	Supercedes Date:	Initial Issue

SECTION 1: Identification

1.1. Product identifier 3M[™] Bondo® Glazing & Spot Putty 651

1.2. Recommended use and restrictions on use

Recommended use

Automotive, Filler for automotive imperfections and scratches

1.3. Supplier's details	
MANUFACTURER:	3M
DIVISION:	Construction and Home Improvement Markets
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

The label elements below were prepared in accordance with OSHA Hazard Communication Standard, 29 CFR 1910.1200. This information may be different from the actual product label information for labels regulated by other agencies.

2.1. Hazard classification

Flammable Liquid: Category 2.
Serious Eye Damage/Irritation: Category 2A.
Reproductive Toxicity: Category 1B.
Carcinogenicity: Category 2.
Specific Target Organ Toxicity (single exposure): Category 1.
Specific Target Organ Toxicity (single exposure): Category 3.
Specific Target Organ Toxicity (repeated exposure): Category 1.

2.2. Label elements Signal word Danger

Symbols Flame | Exclamation mark | Health Hazard | **Pictograms**



Hazard Statements Highly flammable liquid and vapor.

Causes serious eye irritation. May cause drowsiness or dizziness. May damage fertility or the unborn child. Suspected of causing cancer.

Causes damage to organs: sensory organs

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

May cause damage to organs through prolonged or repeated exposure: sensory organs

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. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use explosion-proof electrical/ventilating/lighting equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wear protective gloves and eye/face protection. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF exposed or concerned: Get medical advice/attention.

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. Keep cool. Keep container tightly closed. Store locked up.

Disposal:

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

3% of the mixture consists of ingredients of unknown acute oral toxicity.3% of the mixture consists of ingredients of unknown acute dermal toxicity.3% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Talc	14807-96-6	30 - 55 Trade Secret *
Xylene	1330-20-7	5 - 15 Trade Secret *
1-methoxy-2-propyl acetate	108-65-6	1 - 5 Trade Secret *
2-Butoxyethanol	111-76-2	1 - 5 Trade Secret *
Acetone	67-64-1	1 - 5 Trade Secret *
Dibutyl Phthalate	84-74-2	< 5 Trade Secret *
Ethylbenzene	100-41-4	< 5 Trade Secret *
Isopropyl Alcohol	67-63-0	1 - 5 Trade Secret *
MIBK	108-10-1	1 - 5 Trade Secret *
Toluene	108-88-3	< 0.2 Trade Secret *

Any remaining components do not contribute to the hazards of this material.

*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

Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness). Target organ effects. See Section 11 for additional details. 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 flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. 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

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 vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. 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

Cover spill area with a fire-extinguishing foam. 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 using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. 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. 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

Do not use in a confined area with minimal air exchange. Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. 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. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (gloves, respirators, etc.) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from heat. 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
Ethylbenzene	100-41-4	ACGIH	TWA:20 ppm	A3: Confirmed animal
-				carcin., Ototoxicant
Ethylbenzene	100-41-4	OSHA	TWA:435 mg/m3(100 ppm)	
MIBK	108-10-1	ACGIH	TWA:20 ppm;STEL:75 ppm	A3: Confirmed animal carcin.
MIBK	108-10-1	OSHA	TWA:410 mg/m3(100 ppm)	
1-methoxy-2-propyl acetate	108-65-6	AIHA	TWA:50 ppm	
Toluene	108-88-3	ACGIH	TWA:20 ppm	A4: Not class. as human carcin, Ototoxicant
Toluene	108-88-3	OSHA	TWA:200 ppm;CEIL:300 ppm	
2-Butoxyethanol	111-76-2	ACGIH	TWA:20 ppm	A3: Confirmed animal carcin.
2-Butoxyethanol	111-76-2	OSHA	TWA:240 mg/m3(50 ppm)	SKIN
Xylene	1330-20-7	ACGIH	TWA:20 ppm;STEL:150 ppm	A4: Not class. as human carcin
Xylene	1330-20-7	OSHA	TWA:435 mg/m3(100 ppm)	
Talc	14807-96-6	ACGIH	TWA(respirable fraction):2 mg/m3	A4: Not class. as human carcin
TALC	14807-96-6	OSHA	TWA - Use asbestos limits:	
Talc	14807-96-6	OSHA	TWA concentration(respirable):0.1 mg/m3(2.4 millions of particles/cu. ft.);TWA:20 millions of particles/cu. ft.	
Isopropyl Alcohol	67-63-0	ACGIH	TWA:200 ppm;STEL:400 ppm	A4: Not class. as human carcin
Isopropyl Alcohol	67-63-0	OSHA	TWA:980 mg/m3(400 ppm)	
Acetone	67-64-1	ACGIH	TWA:250 ppm;STEL:500 ppm	A4: Not class. as human carcin
Acetone	67-64-1	OSHA	TWA:2400 mg/m3(1000 ppm)	
Dibutyl Phthalate	84-74-2	ACGIH	TWA:5 mg/m3	
Dibutyl Phthalate	84-74-2	OSHA	TWA:5 mg/m3	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

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. Use explosion-proof ventilation equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended: Safety Glasses with side shields 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. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended: 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 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

Appearance		
Physical state	Liquid	
Color	Red	
Specific Physical Form:	Paste	
Odor	Solvent	
Odor threshold	No Data Available	
рН	Not Applicable	
Melting point	No Data Available	
Boiling Point	132 °F	
Flash Point	63 °F [Test Method:Closed Cup]	
Evaporation rate	No Data Available	
Flammability (solid, gas)	Not Applicable	
Flammable Limits(LEL)	1.00 %	
Flammable Limits(UEL)	13.00 %	
Vapor Pressure	<=27 psia [@ 131 °F] [Details: MITS data]	
Vapor Density	No Data Available	
Density	13.047 lb/gal	
Density	1.56 g/ml	
Specific Gravity	1.56 [<i>Ref Std</i> :WATER=1]	
Solubility in Water	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	33,000 - 450,000 centipoise	

Hazardous Air Pollutants Volatile Organic Compounds Volatile Organic Compounds Percent volatile VOC Less H2O & Exempt Solvents 0.27 lb HAPS/lb solids [*Test Method*:Calculated]
444 g/l [*Test Method*:calculated SCAQMD rule 443.1]
28.3 % weight [*Test Method*:calculated per CARB title 2]
32.7 % weight [*Test Method*:Estimated]
444 g/l [*Test Method*:calculated SCAQMD rule 443.1]

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 Heat

10.5. Incompatible materials Strong acids Strong oxidizing agents

10.6. Hazardous decomposition products

<u>Substance</u> Carbon monoxide Carbon dioxide Toxic Vapor, Gas, Particulate <u>Condition</u> Not Specified 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 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.

May cause additional health effects (see below).

Skin Contact:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Eye Contact:

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

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:

Single exposure may cause target organ effects:

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Prolonged or repeated exposure may cause target organ effects:

Pneumoconiosis: Sign/symptoms may include persistent cough, breathlessness, chest pain, increased amounts of sputum, and changes in lung function tests.

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

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
Talc containing asbestiform fibres	14807-96-6	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
Ethylbenzene	100-41-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Methyl isobutyl ketone	108-10-1	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

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	Inhalation- Vapor(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Talc	Dermal		LD50 estimated to be > 5,000 mg/kg
Talc	Ingestion		LD50 estimated to be > 5,000 mg/kg
Xylene	Dermal	Rabbit	LD50 > 4,200 mg/kg
Xylene	Inhalation- Vapor (4 hours)	Rat	LC50 29 mg/l
Xylene	Ingestion	Rat	LD50 3,523 mg/kg
2-Butoxyethanol	Dermal	Guinea pig	LD50 > 2,000 mg/kg
2-Butoxyethanol	Inhalation- Vapor (4 hours)	Guinea pig	LC50 > 2.6 mg/l

2-Butoxyethanol	Ingestion	Guinea pig	LD50 1,200 mg/kg
1-methoxy-2-propyl acetate	Dermal	Rabbit	LD50 > 5,000 mg/kg
1-methoxy-2-propyl acetate	Inhalation- Vapor (4 hours)	Rat	LC50 > 28.8 mg/l
1-methoxy-2-propyl acetate	Ingestion	Rat	LD50 8,532 mg/kg
Acetone	Dermal	Rabbit	LD50 > 15,688 mg/kg
Acetone	Inhalation- Vapor (4 hours)	Rat	LC50 76 mg/l
Acetone	Ingestion	Rat	LD50 5,800 mg/kg
MIBK	Dermal	Rabbit	LD50 > 16,000 mg/kg
MIBK	Inhalation- Vapor (4 hours)	Rat	LC50 11 mg/l
MIBK	Ingestion	Rat	LD50 3,038 mg/kg
Ethylbenzene	Dermal	Rabbit	LD50 15,433 mg/kg
Ethylbenzene	Inhalation- Vapor (4 hours)	Rat	LC50 17.4 mg/l
Ethylbenzene	Ingestion	Rat	LD50 4,769 mg/kg
Isopropyl Alcohol	Dermal	Rabbit	LD50 12,870 mg/kg
Isopropyl Alcohol	Inhalation- Vapor (4 hours)	Rat	LC50 72.6 mg/l
Isopropyl Alcohol	Ingestion	Rat	LD50 4,710 mg/kg
Dibutyl Phthalate	Dermal	Rabbit	LD50 > 20,000 mg/kg
Dibutyl Phthalate	Inhalation- Dust/Mist (4 hours)	Rat	LC50 15.7 mg/l
Dibutyl Phthalate	Ingestion	Rat	LD50 6,300 mg/kg
Toluene	Dermal	Rat	LD50 12,000 mg/kg
Toluene	Inhalation- Vapor (4 hours)	Rat	LC50 30 mg/l
Toluene	Ingestion	Rat	LD50 5,550 mg/kg

 $\overline{\text{ATE}}$ = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Talc	Rabbit	No significant irritation
Xylene	Rabbit	Mild irritant
2-Butoxyethanol	Rabbit	Irritant
1-methoxy-2-propyl acetate	Rabbit	No significant irritation
Acetone	Mouse	Minimal irritation
MIBK	Rabbit	Mild irritant
Ethylbenzene	Rabbit	Mild irritant
Isopropyl Alcohol	Multiple	No significant irritation
	animal	
	species	
Dibutyl Phthalate	Rabbit	No significant irritation
Toluene	Rabbit	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
Talc	Rabbit	No significant irritation
Xylene	Rabbit	Mild irritant
2-Butoxyethanol	Rabbit	Severe irritant
1-methoxy-2-propyl acetate	Rabbit	Mild irritant
Acetone	Rabbit	Severe irritant
MIBK	Rabbit	Mild irritant

Ethylbenzene	Rabbit	Moderate irritant
Isopropyl Alcohol	Rabbit	Severe irritant
Dibutyl Phthalate	Rabbit	Mild irritant
Toluene	Rabbit	Moderate irritant

Skin Sensitization

Name	Species	Value
2-Butoxyethanol	Guinea	Not classified
	pig	
1-methoxy-2-propyl acetate	Guinea	Not classified
	pig	
MIBK	Guinea	Not classified
	pig	
Ethylbenzene	Human	Not classified
Isopropyl Alcohol	Guinea	Not classified
	pig	
Toluene	Guinea	Not classified
	pig	

Respiratory Sensitization

Name	Species	Value
Talc	Human	Not classified

Germ Cell Mutagenicity

Name	Route	Value
Talc	In Vitro	Not mutagenic
Talc	In vivo	Not mutagenic
Xylene	In Vitro	Not mutagenic
Xylene	In vivo	Not mutagenic
2-Butoxyethanol	In Vitro	Some positive data exist, but the data are not sufficient for classification
1-methoxy-2-propyl acetate	In Vitro	Not mutagenic
Acetone	In vivo	Not mutagenic
Acetone	In Vitro	Some positive data exist, but the data are not sufficient for classification
MIBK	In Vitro	Not mutagenic
Ethylbenzene	In vivo	Not mutagenic
Ethylbenzene	In Vitro	Some positive data exist, but the data are not sufficient for classification
Isopropyl Alcohol	In Vitro	Not mutagenic
Isopropyl Alcohol	In vivo	Not mutagenic
Toluene	In Vitro	Not mutagenic
Toluene	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Talc	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Xylene	Dermal	Rat	Not carcinogenic
Xylene	Ingestion	Multiple animal species	Not carcinogenic
Xylene	Inhalation	Human	Some positive data exist, but the data are not sufficient for classification
2-Butoxyethanol	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Acetone	Not Specified	Multiple animal species	Not carcinogenic
MIBK	Inhalation	Multiple	Carcinogenic

		animal species	
Ethylbenzene	Inhalation	Multiple animal species	Carcinogenic
Isopropyl Alcohol	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Toluene	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Toluene	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
Toluene	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Talc	Ingestion	Not classified for development	Rat	NOAEL 1,600 mg/kg	during organogenesi s
Xylene	Inhalation	Not classified for female reproduction	Human	NOAEL Not available	occupational exposure
Xylene	Ingestion	Not classified for development	Mouse	NOAEL Not available	during organogenesi s
Xylene	Inhalation	Not classified for development	Multiple animal species	NOAEL Not available	during gestation
2-Butoxyethanol	Dermal	Not classified for development	Rat	NOAEL 1,760 mg/kg/day	during gestation
2-Butoxyethanol	Ingestion	Not classified for development	Rat	NOAEL 100 mg/kg/day	during organogenesi s
2-Butoxyethanol	Inhalation	Not classified for development	Multiple animal species	NOAEL 0.48 mg/l	during organogenesi s
1-methoxy-2-propyl acetate	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
1-methoxy-2-propyl acetate	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
1-methoxy-2-propyl acetate	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
1-methoxy-2-propyl acetate	Inhalation	Not classified for development	Rat	NOAEL 21.6 mg/l	during organogenesi s
Acetone	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,700 mg/kg/day	13 weeks
Acetone	Inhalation	Not classified for development	Rat	NOAEL 5.2 mg/l	during organogenesi s
MIBK	Inhalation	Not classified for female reproduction	Multiple animal species	NOAEL 8.2 mg/l	2 generation
MIBK	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	13 weeks
MIBK	Inhalation	Not classified for male reproduction	Multiple animal species	NOAEL 8.2 mg/l	2 generation
MIBK	Inhalation	Not classified for development	Mouse	NOAEL 12.3 mg/l	during organogenesi s

Ethylbenzene	Inhalation	Not classified for development	Rat	NOAEL 4.3 mg/l	premating & during gestation
Isopropyl Alcohol	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	2 generation
Isopropyl Alcohol	Ingestion	Not classified for male reproduction	Rat	NOAEL 500 mg/kg/day	2 generation
Isopropyl Alcohol	Ingestion	Not classified for development	Rat	NOAEL 400 mg/kg/day	during organogenesi s
Isopropyl Alcohol	Inhalation	Not classified for development	Rat	LOAEL 9 mg/l	during gestation
Dibutyl Phthalate	Ingestion	Toxic to female reproduction	Rat	NOAEL Not available	
Dibutyl Phthalate	Ingestion	Toxic to male reproduction	Rat	NOAEL Not available	
Dibutyl Phthalate	Ingestion	Toxic to development	Rat	NOAEL 50 mg/kg/day	during gestation
Toluene	Inhalation	Not classified for female reproduction	Human	NOAEL Not available	occupational exposure
Toluene	Inhalation	Not classified for male reproduction	Rat	NOAEL 2.3 mg/l	1 generation
Toluene	Ingestion	Toxic to development	Rat	LOAEL 520 mg/kg/day	during gestation
Toluene	Inhalation	Toxic to development	Human	NOAEL Not available	poisoning and/or abuse

Lactation

Name	Route	Species	Value
Xylene	Ingestion	Mouse	Not classified for effects on or via lactation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Xylene	Inhalation	auditory system	Causes damage to organs	Rat	LOAEL 6.3 mg/l	8 hours
Xylene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Xylene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Xylene	Inhalation	eyes	Not classified	Rat	NOAEL 3.5 mg/l	not available
Xylene	Inhalation	liver	Not classified	Multiple animal species	NOAEL Not available	
Xylene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	
Xylene	Ingestion	eyes	Not classified	Rat	NOAEL 250 mg/kg	not applicable
2-Butoxyethanol	Dermal	endocrine system	Not classified	Rabbit	NOAEL 902 mg/kg	6 hours
2-Butoxyethanol	Dermal	liver	Not classified	Rabbit	LOAEL 72 mg/kg	not available
2-Butoxyethanol	Dermal	kidney and/or bladder	Not classified	Rabbit	LOAEL 451 mg/kg	6 hours
2-Butoxyethanol	Dermal	blood	Not classified	Multiple animal species	NOAEL Not available	
2-Butoxyethanol	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	

2-Butoxyethanol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
2-Butoxyethanol	Inhalation	blood	Not classified	Multiple animal species	NOAEL Not available	
2-Butoxyethanol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
2-Butoxyethanol	Ingestion	blood	Not classified	Multiple animal species	NOAEL Not available	
2-Butoxyethanol	Ingestion	kidney and/or bladder	Not classified	Human	NOAEL Not available	poisoning and/or abuse
1-methoxy-2-propyl acetate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
1-methoxy-2-propyl acetate	Ingestion	central nervous system depression	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL not available	
Acetone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Acetone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Acetone	Inhalation	immune system	Not classified	Human	NOAEL 1.19 mg/l	6 hours
Acetone	Inhalation	liver	Not classified	Guinea pig	NOAEL Not available	
Acetone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
MIBK	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	LOAEL 0.1 mg/l	2 hours
MIBK	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
MIBK	Inhalation	vascular system	Not classified	Dog	NOAEL Not available	not available
MIBK	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Rat	LOAEL 900 mg/kg	not applicable
Ethylbenzene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Ethylbenzene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	
Isopropyl Alcohol	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Isopropyl Alcohol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Isopropyl Alcohol	Inhalation	auditory system	Not classified	Guinea pig	NOAEL 13.4 mg/l	24 hours
Isopropyl Alcohol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
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

Specific Target Organ Toxicity - repeated exposure

Name Route Target Organ(s) Value Species Test Result Exposure	<u></u>					
	Name	Route	Target Organ(s)	Value	Species	Exposure

Talc	Inhalation	pneumoconiosis	Causes damage to organs through	Human	NOAEL Not	Duration occupational
			prolonged or repeated exposure		available	exposure
Talc	Inhalation	pulmonary fibrosis respiratory system	Not classified	Rat	NOAEL 18 mg/m3	113 weeks
Xylene	Inhalation	nervous system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.4 mg/l	4 weeks
Xylene	Inhalation	auditory system	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 7.8 mg/l	5 days
Xylene	Inhalation	liver	Not classified	Multiple animal species	NOAEL Not available	
Xylene	Inhalation	heart endocrine system gastrointestinal tract hematopoietic system muscles kidney and/or bladder respiratory system	Not classified	Multiple animal species	NOAEL 3.5 mg/l	13 weeks
Xylene	Ingestion	auditory system	Not classified	Rat	NOAEL 900 mg/kg/day	2 weeks
Xylene	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 1,500 mg/kg/day	90 days
Xylene	Ingestion	liver	Not classified	Multiple animal species	NOAEL Not available	
Xylene	Ingestion	heart skin endocrine system bone, teeth, nails, and/or hair hematopoietic system immune system nervous system respiratory system	Not classified	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
2-Butoxyethanol	Dermal	blood	Not classified	Multiple animal species	NOAEL Not available	not available
2-Butoxyethanol	Dermal	endocrine system	Not classified	Rabbit	NOAEL 150 mg/kg/day	90 days
2-Butoxyethanol	Inhalation	liver	Not classified	Rat	NOAEL 2.4 mg/l	14 weeks
2-Butoxyethanol	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 0.15 mg/l	14 weeks
2-Butoxyethanol	Inhalation	blood	Not classified	Rat	LOAEL 0.15 mg/l	6 months
2-Butoxyethanol	Inhalation	endocrine system	Not classified	Dog	LOAEL 1.9 mg/l	8 days
2-Butoxyethanol	Ingestion	blood	Not classified	Rat	LOAEL 69 mg/kg/day	13 weeks
2-Butoxyethanol	Ingestion	kidney and/or bladder	Not classified	Multiple animal species	NOAEL Not available	not available
1-methoxy-2-propyl acetate	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 16.2 mg/l	9 days
1-methoxy-2-propyl acetate	Inhalation	olfactory system	Not classified	Mouse	LOAEL 1.62 mg/l	9 days
1-methoxy-2-propyl acetate	Inhalation	blood	Not classified	Multiple animal species	NOAEL 16.2 mg/l	9 days
1-methoxy-2-propyl acetate	Ingestion	endocrine system	Not classified	Rat	NOAEL 1,000 mg/kg/day	44 days
Acetone	Dermal	eyes	Not classified	Guinea	NOAEL Not	3 weeks

				pig	available	
Acetone	Inhalation	hematopoietic system	Not classified	Human	NOAEL 3 mg/l	6 weeks
Acetone	Inhalation	immune system	Not classified	Human	NOAEL 1.19 mg/l	6 days
Acetone	Inhalation	kidney and/or bladder	Not classified	Guinea pig	NOAEL 119 mg/l	not available
Acetone	Inhalation	heart liver	Not classified	Rat	NOAEL 45 mg/l	8 weeks
Acetone	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 900 mg/kg/day	13 weeks
Acetone	Ingestion	heart	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 200 mg/kg/day	13 weeks
Acetone	Ingestion	liver	Not classified	Mouse	NOAEL 3,896 mg/kg/day	14 days
Acetone	Ingestion	eyes	Not classified	Rat	NOAEL 3,400 mg/kg/day	13 weeks
Acetone	Ingestion	respiratory system	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	muscles	Not classified	Rat	NOAEL 2,500 mg/kg	13 weeks
Acetone	Ingestion	skin bone, teeth, nails, and/or hair	Not classified	Mouse	NOAEL 11,298 mg/kg/day	13 weeks
MIBK	Inhalation	liver	Not classified	Rat	NOAEL 0.41 mg/l	13 weeks
MIBK	Inhalation	heart	Not classified	Multiple animal species	NOAEL 0.8 mg/l	2 weeks
MIBK	Inhalation	kidney and/or bladder	Not classified	Multiple animal species	NOAEL 0.4 mg/l	90 days
MIBK	Inhalation	respiratory system	Not classified	Multiple animal species	NOAEL 4.1 mg/l	14 weeks
MIBK	Inhalation	endocrine system hematopoietic system	Not classified	Multiple animal species	NOAEL 0.41 mg/l	90 days
MIBK	Inhalation	nervous system	Not classified	Multiple animal species	NOAEL 0.41 mg/l	13 weeks
MIBK	Ingestion	endocrine system hematopoietic system liver kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
MIBK	Ingestion	heart immune system muscles nervous system respiratory system	Not classified	Rat	NOAEL 1,040 mg/kg/day	120 days
Ethylbenzene	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.1 mg/l	2 years
Ethylbenzene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 1.1 mg/l	103 weeks
Ethylbenzene	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 3.4 mg/l	28 days
Ethylbenzene	Inhalation	auditory system	Not classified	Rat	NOAEL 2.4 mg/l	5 days
Ethylbenzene	Inhalation	endocrine system	Not classified	Mouse	NOAEL 3.3	103 weeks

					mg/l	
Ethylbenzene	Inhalation	gastrointestinal tract	Not classified	Rat	NOAEL 3.3 mg/l	2 years
Ethylbenzene	Inhalation	bone, teeth, nails, and/or hair muscles	Not classified	Multiple animal species	NOAEL 4.2 mg/l	90 days
Ethylbenzene	Inhalation	heart immune system respiratory system	Not classified	Multiple animal species	NOAEL 3.3 mg/l	2 years
Ethylbenzene	Ingestion	liver kidney and/or bladder	Not classified	Rat	NOAEL 680 mg/kg/day	6 months
Isopropyl Alcohol	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 12.3 mg/l	24 months
Isopropyl Alcohol	Inhalation	nervous system	Not classified	Rat	NOAEL 12 mg/l	13 weeks
Isopropyl Alcohol	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 400 mg/kg/day	12 weeks
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

Aspiration Hazard

Name	Value
Xylene	Aspiration hazard
MIBK	Some positive data exist, but the data are not sufficient for classification
Ethylbenzene	Aspiration hazard
Toluene	Aspiration hazard

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

SECTION 12: Ecological information

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.

Incinerate in a permitted waste incineration facility. 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.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable), D018 (Benzene)

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.

EPCRA 311/312 Hazard Classifications:

Physical Hazards

Flammable (gases, aerosols, liquids, or solids)

Health Hazards
Carcinogenicity
Reproductive toxicity
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)

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

Ingredient	<u>C.A.S. No</u>	<u>% by Wt</u>	
Xylene	1330-20-7	Trade Secret 5 - 15	
Xylene (Benzene, dimethyl-)	1330-20-7	Trade Secret 5 - 15	
2-Butoxyethanol (CAS NO SEQ548L1)	111-76-2	Trade Secret 1 - 5	
2-Butoxyethanol (GLYCOL ETHERS)	111-76-2	Trade Secret 1 - 5	
MIBK	108-10-1	Trade Secret 1 - 5	

Ethylbenzene	100-41-4	Trade Secret < 5
Isopropyl Alcohol	67-63-0	Trade Secret 1 - 5
Dibutyl Phthalate	84-74-2	Trade Secret < 5

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. All required components of this product are listed on the active portion of the TSCA Inventory.

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: 3 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:	44-2832-2	Version Number:	1.00
Issue Date:	07/17/23	Supercedes Date:	Initial Issue

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