



Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier

3M™ Bondo® Glazing & Spot Putty 650, 651, 652C

Product Identification Numbers

60-4550-5590-9, 60-4550-6679-9, 70-0080-0027-8, 70-0080-0028-6, 70-0080-0356-1

1.2. Recommended use and restrictions on use

Recommended use

Automotive

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Automotive Aftermarket
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 (central nervous system): Category 3.
 Specific Target Organ Toxicity (repeated exposure): Category 1.
 Specific Target Organ Toxicity (repeated exposure): Category 2.

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:

blood or blood-forming organs |

sensory organs |

Causes damage to organs through prolonged or repeated exposure:

blood or blood-forming organs |

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 exposed: Call a POISON CENTER or doctor/physician.

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.

2.3. Hazards not otherwise classified

None.

4% of the mixture consists of ingredients of unknown acute oral toxicity.

62% of the mixture consists of ingredients of unknown acute dermal toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Talc	14807-96-6	30 - 60 Trade Secret *
Magnesium Carbonate	546-93-0	10 - 30 Trade Secret *
Xylene	1330-20-7	7 - 13 Trade Secret *
1-Methoxy-2-Propylacetate	108-65-6	3 - 7 Trade Secret *
Nitrocellulose	9004-70-0	3 - 7 Trade Secret *
2-Butoxyethanol	111-76-2	3 - 7 Trade Secret *
Acetone	67-64-1	1 - 5 Trade Secret *
Isopropyl Alcohol	67-63-0	1 - 5 Trade Secret *
Ethylbenzene	100-41-4	0.1 - 5 Trade Secret *
Alkyd Resin (OSHA Non-Hazardous)	Trade Secret*	1 - 5 Trade Secret *
Iron Oxide	1332-37-2	1 - 5 Trade Secret *
Methyl Isobutyl Ketone	108-10-1	1 - 5 Trade Secret *
Chlorite (Mineral)	1318-59-8	< 2.5 Trade Secret *
Limestone	1317-65-3	0.5 - 1.5 Trade Secret *
Dibutyl Phthalate	84-74-2	0.5 - 1.5 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

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.

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. An appropriate aqueous film forming foam (AFFF) is recommended. 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.

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. Vapors may travel long distances along the ground or floor to an ignition source and flash back.

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.
Ethylbenzene	100-41-4	OSHA	TWA:435 mg/m ³ (100 ppm)	
Ethylbenzene	100-41-4	CMRG	TWA:25 ppm;STEL:75 ppm	
Methyl Isobutyl Ketone	108-10-1	OSHA	TWA:410 mg/m ³ (100 ppm)	
Methyl Isobutyl Ketone	108-10-1	ACGIH	TWA:20 ppm;STEL:75 ppm	A3: Confirmed animal carcin.
1-Methoxy-2-Propylacetate	108-65-6	AIHA	TWA:50 ppm	
1-Methoxy-2-Propylacetate	108-65-6	CMRG	TWA:10 mg/m ³ ;STEL:90 ppm	
2-Butoxyethanol	111-76-2	ACGIH	TWA:20 ppm	A3: Confirmed animal carcin.
2-Butoxyethanol	111-76-2	OSHA	TWA:240 mg/m ³ (50 ppm)	Skin Notation
Limestone	1317-65-3	OSHA	TWA(as total dust):15 mg/m ³ ;TWA(respirable fraction):5 mg/m ³	
Xylene	1330-20-7	ACGIH	TWA:100 ppm;STEL:150 ppm	A4: Not class. as human carcin
Xylene	1330-20-7	OSHA	TWA:435 mg/m ³ (100 ppm)	
Xylene	1330-20-7	CMRG	TWA:50 ppm;STEL:75 ppm	
Talc	14807-96-6	OSHA	TWA concentration(as total dust):0.3 mg/m ³ ;TWA concentration(respirable):0.1 mg/m ³ (2.4 millions of particles/cu. ft.);TWA:20 millions of particles/cu. ft.	
Talc	14807-96-6	ACGIH	TWA(respirable fraction):2 mg/m ³	A4: Not class. as human carcin
Talc	14807-96-6	CMRG	TWA(as respirable dust):0.5 mg/m ³	
Magnesium Carbonate	546-93-0	OSHA	TWA(as total dust):15 mg/m ³ ;TWA(respirable fraction):5 mg/m ³	
Isopropyl Alcohol	67-63-0	OSHA	TWA:980 mg/m ³ (400 ppm)	
Isopropyl Alcohol	67-63-0	ACGIH	TWA:200 ppm;STEL:400 ppm	A4: Not class. as human carcin
Acetone	67-64-1	ACGIH	TWA:500 ppm;STEL:750 ppm	A4: Not class. as human carcin
Acetone	67-64-1	OSHA	TWA:2400 mg/m ³ (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:
 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: Fluoroelastomer
 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

General Physical Form:	Liquid
Specific Physical Form:	Paste
Odor, Color, Grade:	Solvent Odor, Green Smooth Paste
Odor threshold	<i>No Data Available</i>
pH	<i>Not Applicable</i>
Melting point	<i>No Data Available</i>
Boiling Point	132 °F
Flash Point	63 °F [<i>Test Method:</i> Closed Cup]
Evaporation rate	<i>No Data Available</i>
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	1.00 %

Flammable Limits(UEL)	13.00 %
Vapor Pressure	<=27 psia [@ 131.000000000 °F] [Details: MITS data]
Vapor Density	No Data Available
Density	13.047 lb/gal
Density	1.56 g/ml
Specific Gravity	1.56 [Ref Std: 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	0.27 lb HAPS/lb solids [Test Method: Calculated]
Volatile Organic Compounds	444 g/l [Test Method: calculated SCAQMD rule 443.1]
Volatile Organic Compounds	28.3 % weight [Test Method: calculated per CARB title 2]
Percent volatile	32.7 % weight [Test Method: Estimated]
VOC Less H2O & Exempt Solvents	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>	<u>Condition</u>
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified
Toxic Vapor, Gas, Particulate	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:

May be harmful if inhaled.

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:

May be harmful in contact with skin.

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.

Blood Effects: Signs/symptoms may include generalized weakness and fatigue, skin pallor, changes in blood clotting time, internal bleeding, and/or hemoglobinemia.

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.

Blood Effects: Signs/symptoms may include generalized weakness and fatigue, skin pallor, changes in blood clotting time, internal bleeding, and/or hemoglobinemia.

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
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 2,000 - 5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE 20 - 50 mg/l
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
Talc	Dermal		LD50 Not available
Talc	Ingestion		LD50 Not available
Magnesium Carbonate	Ingestion	Mouse	LD50 > 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	Rabbit	LD50 400 mg/kg
2-Butoxyethanol	Inhalation-Vapor (4 hours)	Rat	LC50 2.2 mg/l
2-Butoxyethanol	Ingestion	Rat	LD50 560 mg/kg
1-Methoxy-2-Propylacetate	Dermal	Rabbit	LD50 > 5,000 mg/kg
1-Methoxy-2-Propylacetate	Inhalation-Vapor (4 hours)	Rat	LC50 > 28.8 mg/l
1-Methoxy-2-Propylacetate	Ingestion	Rat	LD50 8,532 mg/kg
Nitrocellulose	Ingestion	Rat	LD50 > 5,000 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
Methyl Isobutyl Ketone	Dermal	Rabbit	LD50 > 16,000 mg/kg
Methyl Isobutyl Ketone	Inhalation-Vapor (4 hours)	Rat	LC50 >8.2,<16.4 mg/l
Methyl Isobutyl Ketone	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
Iron Oxide	Dermal	Not available	LD50 3,100 mg/kg
Iron Oxide	Ingestion	Not available	LD50 3,700 mg/kg
Limestone	Dermal	Rat	LD50 > 2,000 mg/kg
Limestone	Inhalation-Dust/Mist (4 hours)	Rat	LC50 3.0 mg/l
Limestone	Ingestion	Rat	LD50 6,450 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

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Talc	Rabbit	No significant irritation
Magnesium Carbonate	In vitro data	Minimal irritation
Xylene	Rabbit	Mild irritant
2-Butoxyethanol	Rabbit	Irritant
1-Methoxy-2-Propylacetate	Rabbit	No significant irritation
Nitrocellulose		No significant irritation
Acetone	Mouse	Minimal irritation
Methyl Isobutyl Ketone	Rabbit	Mild irritant
Ethylbenzene	Rabbit	Mild irritant
Isopropyl Alcohol	Multiple animal species	No significant irritation
Iron Oxide	Rabbit	No significant irritation
Limestone	Rabbit	No significant irritation
Dibutyl Phthalate	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Talc	Rabbit	No significant irritation
Magnesium Carbonate	Rabbit	Mild irritant
Xylene	Rabbit	Mild irritant
2-Butoxyethanol	Rabbit	Severe irritant
1-Methoxy-2-Propylacetate	Rabbit	Mild irritant
Nitrocellulose		No significant irritation
Acetone	Rabbit	Severe irritant
Methyl Isobutyl Ketone	Rabbit	Mild irritant
Ethylbenzene	Rabbit	Moderate irritant
Isopropyl Alcohol	Rabbit	Severe irritant
Iron Oxide	Rabbit	No significant irritation
Limestone	Rabbit	No significant irritation
Dibutyl Phthalate	Rabbit	Mild irritant

Skin Sensitization

Name	Species	Value
2-Butoxyethanol	Guinea pig	Not sensitizing
1-Methoxy-2-Propylacetate	Guinea pig	Not sensitizing
Methyl Isobutyl Ketone	Guinea pig	Not sensitizing
Ethylbenzene	Human	Not sensitizing
Isopropyl Alcohol	Guinea pig	Not sensitizing
Iron Oxide	Human	Some positive data exist, but the data are not sufficient for classification

Respiratory Sensitization

Name	Species	Value
Talc	Human	Not sensitizing

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-Propylacetate	In Vitro	Not mutagenic
Acetone	In vivo	Not mutagenic
Acetone	In Vitro	Some positive data exist, but the data are not sufficient for classification
Methyl Isobutyl Ketone	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
Iron Oxide	In Vitro	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
Methyl Isobutyl Ketone	Inhalation	Multiple animal species	Carcinogenic
Ethylbenzene	Inhalation	Multiple animal species	Carcinogenic
Isopropyl Alcohol	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Iron Oxide	Inhalation	Human	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 toxic to development	Rat	NOAEL 1,600 mg/kg	during organogenesis
Xylene	Ingestion	Not toxic to female reproduction	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Xylene	Ingestion	Not toxic to male reproduction	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Xylene	Inhalation	Some positive female reproductive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Xylene	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Mouse	NOAEL Not available	during organogenesis
Xylene	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	during gestation
2-Butoxyethanol	Dermal	Not toxic to development	Rat	NOAEL 1,760 mg/kg/day	during gestation

2-Butoxyethanol	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 100 mg/kg/day	during organogenesis
2-Butoxyethanol	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 0.48 mg/l	during organogenesis
1-Methoxy-2-Propylacetate	Ingestion	Not toxic to female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
1-Methoxy-2-Propylacetate	Ingestion	Not toxic to male reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
1-Methoxy-2-Propylacetate	Ingestion	Not toxic to development	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
1-Methoxy-2-Propylacetate	Inhalation	Not toxic to development	Rat	NOAEL 21.6 mg/l	during organogenesis
Acetone	Ingestion	Not toxic to female reproduction	Mouse	NOAEL 11,298 mg/kg/day	13 weeks
Acetone	Ingestion	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,700 mg/kg/day	13 weeks
Acetone	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 5.2 mg/l	during organogenesis
Methyl Isobutyl Ketone	Inhalation	Not toxic to female reproduction	Multiple animal species	NOAEL 8.2 mg/l	2 generation
Methyl Isobutyl Ketone	Ingestion	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	13 weeks
Methyl Isobutyl Ketone	Inhalation	Some positive male reproductive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 8.2 mg/l	2 generation
Methyl Isobutyl Ketone	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Mouse	NOAEL 12.3 mg/l	during organogenesis
Ethylbenzene	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 4.3 mg/l	premating & during gestation
Isopropyl Alcohol	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 400 mg/kg/day	during organogenesis
Isopropyl Alcohol	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	LOAEL 9 mg/l	during gestation
Limestone	Ingestion	Not toxic to development	Rat	NOAEL 625 mg/kg/day	premating & 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

Lactation

Name	Route	Species	Value
Xylene	Ingestion	Mouse	Does not cause 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	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 3.5 mg/l	not available
Xylene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	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	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 250 mg/kg	not applicable
2-Butoxyethanol	Dermal	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rabbit	NOAEL 902 mg/kg	6 hours
2-Butoxyethanol	Dermal	liver	Some positive data exist, but the data are not sufficient for classification	Rabbit	LOAEL 72 mg/kg	not available
2-Butoxyethanol	Dermal	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rabbit	LOAEL 451 mg/kg	6 hours
2-Butoxyethanol	Dermal	blood	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	not available
2-Butoxyethanol	Inhalation	blood	May cause damage to organs	Multiple animal species	NOAEL Not available	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	Ingestion	blood	Causes damage to organs	Human	NOAEL Not available	poisoning and/or abuse
2-Butoxyethanol	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	poisoning and/or abuse
1-Methoxy-2-Propylacetate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		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	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL 1.19 mg/l	6 hours
Acetone	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Guinea pig	NOAEL Not available	
Acetone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
Methyl Isobutyl Ketone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	LOAEL 0.10 mg/l	2 hours
Methyl Isobutyl Ketone	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL 0.9 mg/l	7 minutes
Methyl Isobutyl Ketone	Inhalation	vascular system	Some positive data exist, but the data are not sufficient for	Dog	NOAEL Not available	not available

			classification			
Methyl Isobutyl Ketone	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	Some positive data exist, but the data are not sufficient for classification	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
Limestone	Inhalation	respiratory system	All data are negative	Rat	NOAEL 0.812 mg/l	90 minutes

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Talc	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Talc	Inhalation	pulmonary fibrosis respiratory system	Some positive data exist, but the data are not sufficient for classification	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	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	
Xylene	Inhalation	heart endocrine system hematopoietic system muscles kidney and/or bladder respiratory system	All data are negative	Multiple animal species	NOAEL 3.5 mg/l	13 weeks
Xylene	Ingestion	auditory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 900 mg/kg/day	2 weeks
Xylene	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,500 mg/kg/day	90 days
Xylene	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	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	All data are negative	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
2-Butoxyethanol	Dermal	blood	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	not available
2-Butoxyethanol	Dermal	endocrine system	All data are negative	Rabbit	NOAEL 150	90 days

					mg/kg/day	
2-Butoxyethanol	Inhalation	blood	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 0.12 mg/l	90 days
2-Butoxyethanol	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2.4 mg/l	14 weeks
2-Butoxyethanol	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.15 mg/l	14 weeks
2-Butoxyethanol	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification	Dog	LOAEL 1.9 mg/l	8 days
2-Butoxyethanol	Ingestion	blood	Causes damage to organs through prolonged or repeated exposure	Multiple animal species	NOAEL Not available	not available
2-Butoxyethanol	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	not available
1-Methoxy-2-Propylacetate	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 16.2 mg/l	9 days
1-Methoxy-2-Propylacetate	Inhalation	olfactory system	Some positive data exist, but the data are not sufficient for classification	Mouse	LOAEL 1.62 mg/l	9 days
1-Methoxy-2-Propylacetate	Inhalation	blood	All data are negative	Multiple animal species	NOAEL 16.2 mg/l	9 days
1-Methoxy-2-Propylacetate	Ingestion	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	44 days
Acetone	Dermal	eyes	Some positive data exist, but the data are not sufficient for classification	Guinea pig	NOAEL Not available	3 weeks
Acetone	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL 3 mg/l	6 weeks
Acetone	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL 1.19 mg/l	6 days
Acetone	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Guinea pig	NOAEL 119 mg/l	not available
Acetone	Inhalation	heart liver	All data are negative	Rat	NOAEL 45 mg/l	8 weeks
Acetone	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 900 mg/kg/day	13 weeks
Acetone	Ingestion	heart	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 200 mg/kg/day	13 weeks
Acetone	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 3,896 mg/kg/day	14 days
Acetone	Ingestion	eyes	All data are negative	Rat	NOAEL 3,400 mg/kg/day	13 weeks
Acetone	Ingestion	respiratory system	All data are negative	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	muscles	All data are negative	Rat	NOAEL 2,500 mg/kg	13 weeks
Acetone	Ingestion	skin bone, teeth, nails, and/or hair	All data are negative	Mouse	NOAEL 11,298 mg/kg/day	13 weeks

Methyl Isobutyl Ketone	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.41 mg/l	13 weeks
Methyl Isobutyl Ketone	Inhalation	heart	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 0.8 mg/l	2 weeks
Methyl Isobutyl Ketone	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 0.4 mg/l	90 days
Methyl Isobutyl Ketone	Inhalation	respiratory system	All data are negative	Multiple animal species	NOAEL 4.1 mg/l	14 weeks
Methyl Isobutyl Ketone	Inhalation	endocrine system hematopoietic system	All data are negative	Multiple animal species	NOAEL 0.41 mg/l	90 days
Methyl Isobutyl Ketone	Inhalation	nervous system	All data are negative	Multiple animal species	NOAEL 0.41 mg/l	13 weeks
Methyl Isobutyl Ketone	Ingestion	endocrine system hematopoietic system liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	13 weeks
Methyl Isobutyl Ketone	Ingestion	heart immune system muscles nervous system respiratory system	All data are negative	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	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 3.4 mg/l	28 days
Ethylbenzene	Inhalation	auditory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2.4 mg/l	5 days
Ethylbenzene	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 3.3 mg/l	103 weeks
Ethylbenzene	Inhalation	bone, teeth, nails, and/or hair muscles	All data are negative	Multiple animal species	NOAEL 4.2 mg/l	90 days
Ethylbenzene	Inhalation	heart immune system respiratory system	All data are negative	Multiple animal species	NOAEL 3.3 mg/l	2 years
Ethylbenzene	Ingestion	liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 680 mg/kg/day	6 months
Isopropyl Alcohol	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 12.3 mg/l	24 months
Isopropyl Alcohol	Inhalation	nervous system	All data are negative	Rat	NOAEL 12 mg/l	13 weeks
Isopropyl Alcohol	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 400 mg/kg/day	12 weeks
Iron Oxide	Inhalation	pulmonary fibrosis pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Limestone	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure

Aspiration Hazard

Name	Value
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Xylene	Aspiration hazard
Methyl Isobutyl Ketone	Some positive data exist, but the data are not sufficient for classification
Ethylbenzene	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. 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. US Federal Regulations

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - Yes 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):

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
Xylene	1330-20-7	7 - 13
Xylene (Benzene, 1,4-dimethyl-)	1330-20-7	7 - 13
Xylene (Benzene, dimethyl-)	1330-20-7	7 - 13
Xylene (Benzene, 1,3-dimethyl-)	1330-20-7	7 - 13
Xylene (Benzene, 1,2-dimethyl-)	1330-20-7	7 - 13
2-Butoxyethanol (GLYCOL ETHERS)	111-76-2	3 - 7
Methyl Isobutyl Ketone	108-10-1	1 - 5
Ethylbenzene	100-41-4	0.1 - 5
Dibutyl Phthalate	84-74-2	0.5 - 1.5

15.2. State Regulations

Contact 3M for more information.

California Proposition 65

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Classification</u>
Ethylbenzene	100-41-4	Carcinogen
Methyl Isobutyl Ketone	108-10-1	Carcinogen
Methyl Isobutyl Ketone	108-10-1	Developmental Toxin
Dibutyl Phthalate	84-74-2	Female reproductive toxin
Dibutyl Phthalate	84-74-2	Male reproductive toxin
Dibutyl Phthalate	84-74-2	Developmental Toxin

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

WARNING: This product contains a chemical known to the State of California to cause cancer.

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:** 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.

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