



## Safety Data Sheet

Copyright, 2019, 3M Company.

All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

<b>Document Group:</b>	31-0310-8	<b>Version Number:</b>	2.03
<b>Issue Date:</b>	05/14/19	<b>Supersedes Date:</b>	12/27/17

### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Paintable Undercoating Pouch, PN08747

#### Product Identification Numbers

41-0003-8038-0, 60-4550-6970-2, 60-4551-0913-6  
7100142858, 7100204798

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Automotive, Automotive Undercoating

#### 1.3. Supplier's details

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	Automotive Aftermarket
<b>ADDRESS:</b>	3M Center, St. Paul, MN 55144-1000, USA
<b>Telephone:</b>	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 2B.  
Skin Corrosion/Irritation: Category 2.  
Reproductive Toxicity: Category 1B.  
Carcinogenicity: Category 1A.  
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 eye irritation.

Causes skin irritation.

May cause drowsiness or dizziness.

May damage fertility or the unborn child.

May cause cancer.

Causes damage to organs through prolonged or repeated exposure:

nervous system |

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 ON SKIN: Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

Call a POISON CENTER or doctor/physician if you feel unwell.

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 container tightly closed.  
Keep cool.  
Store locked up.

**Disposal:**

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

**SECTION 3: Composition/information on ingredients**

Ingredient	C.A.S. No.	% by Wt
Toluene	108-88-3	15 - 40 Trade Secret *
Solvent Naphtha (Petroleum), Light Aliphatic	64742-89-8	10 - 30 Trade Secret *
Alpha-Methylstyrene-Vinyltoluene Copolymer	9017-27-0	5 - 10 Trade Secret *
Hydrocarbons, C6-20, Polymers, Hydrogenated	Trade Secret*	5 - 10 Trade Secret *
Hydrogenated Styrene-Butadiene Polymer	Trade Secret*	5 - 10 Trade Secret *
Bis(Hydrogenated Tallow Alkyl)Dimethyl Ammonium Salts with Bentonite	Trade Secret*	1 - 5 Trade Secret *
Carbon Black	1333-86-4	0.5 - 1.5 Trade Secret *
Methyl Alcohol	67-56-1	< 0.5 Trade Secret *
Quartz Silica	14808-60-7	< 0.5 Trade Secret *
Benzene	71-43-2	< 0.05 Trade Secret *
Ethylbenzene	100-41-4	< 0.05 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:**

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

**If Swallowed:**

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

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

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.

### Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Hydrocarbons	During Combustion
Formaldehyde	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

### 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

Contain spill. 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 in accordance with applicable local/regional/national/international regulations.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Avoid eye contact. Avoid breathing of dust created by cutting, sanding, grinding or machining. 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. 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.
Ethylbenzene	100-41-4	OSHA	TWA:435 mg/m3(100 ppm)	
Toluene	108-88-3	ACGIH	TWA:20 ppm	A4: Not class. as human carcin
Toluene	108-88-3	OSHA	TWA:200 ppm;CEIL:300 ppm	
Carbon Black	1333-86-4	ACGIH	TWA(inhalable fraction):3 mg/m3	A3: Confirmed animal carcin.
Carbon Black	1333-86-4	OSHA	TWA:3.5 mg/m3	
Quartz Silica	14808-60-7	ACGIH	TWA(respirable fraction):0.025 mg/m3	A2: Suspected human carcin.
Quartz Silica	14808-60-7	OSHA	TWA Table Z-1(respirable):0.05 mg/m3;TWA Table Z-3(respirable):0.1 mg/m3	
Methyl Alcohol	67-56-1	ACGIH	TWA:200 ppm;STEL:250 ppm	SKIN
Methyl Alcohol	67-56-1	OSHA	TWA:260 mg/m3(200 ppm)	
Benzene	71-43-2	ACGIH	TWA:0.5 ppm;STEL:2.5 ppm	SKIN, A1: Confirmed human carcin.
Benzene	71-43-2	OSHA	TWA:1 ppm;TWA:10 ppm;STEL:5 ppm;CEIL:25 ppm	29 CFR 1910.1028

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. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

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

<b>General Physical Form:</b>	Liquid
<b>Odor, Color, Grade:</b>	Black Solvent
<b>Odor threshold</b>	<i>No Data Available</i>
<b>pH</b>	<i>No Data Available</i>
<b>Melting point</b>	<i>No Data Available</i>
<b>Boiling Point</b>	114 °C
<b>Flash Point</b>	45 °F [ <i>Test Method</i> :Closed Cup]
<b>Evaporation rate</b>	<i>No Data Available</i>
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Flammable Limits(LEL)</b>	1.1 %
<b>Flammable Limits(UEL)</b>	<i>No Data Available</i>
<b>Vapor Pressure</b>	<i>No Data Available</i>
<b>Vapor Density</b>	<i>No Data Available</i>
<b>Density</b>	0.86 g/ml
<b>Specific Gravity</b>	0.86 [ <i>Ref Std</i> :WATER=1]
<b>Solubility in Water</b>	Negligible
<b>Solubility- non-water</b>	<i>No Data Available</i>
<b>Partition coefficient: n-octanol/ water</b>	<i>No Data Available</i>
<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Decomposition temperature</b>	<i>No Data Available</i>
<b>Viscosity</b>	4,500 - 7,000 centipoise
<b>Hazardous Air Pollutants</b>	1.66 lb HAPS/lb solids [ <i>Test Method</i> :Calculated]
<b>Volatile Organic Compounds</b>	576 g/l [ <i>Test Method</i> :calculated SCAQMD rule 443.1]
<b>Volatile Organic Compounds</b>	67 % weight [ <i>Test Method</i> :calculated per CARB title 2]
<b>Percent volatile</b>	67 % weight
<b>VOC Less H2O &amp; Exempt Solvents</b>	576 g/l [ <i>Test Method</i> :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

Heat  
Sparks and/or flames

### 10.5. Incompatible materials

Strong oxidizing agents  
Strong acids

### 10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

### 11.1. Information on Toxicological effects

#### Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

#### Inhalation:

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:

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

#### Eye Contact:

Moderate 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 additional health effects (see below).

#### Additional Health Effects:

##### Single exposure may cause target organ effects:

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:

Ocular Effects: Signs/symptoms may include blurred or significantly impaired vision.

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

Olfactory Effects: Signs/symptoms may include decreased ability to detect odors and/or complete loss of smell.

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
SILICA, CRYST AIRRESP	14808-60-7	Known human carcinogen	National Toxicology Program Carcinogens
Benzene	71-43-2	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
Benzene	71-43-2	Known human carcinogen	National Toxicology Program Carcinogens
Benzene	71-43-2	Cancer hazard	OSHA Carcinogens
Carbon Black	1333-86-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Ethylbenzene	100-41-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Quartz Silica	14808-60-7	Grp. 1: Carcinogenic to humans	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 <sub>20</sub> - 50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Toluene	Dermal	Rat	LD <sub>50</sub> 12,000 mg/kg
Toluene	Inhalation-Vapor (4 hours)	Rat	LC <sub>50</sub> 30 mg/l
Toluene	Ingestion	Rat	LD <sub>50</sub> 5,550 mg/kg
Solvent Naphtha (Petroleum), Light Aliphatic	Dermal	Rabbit	LD <sub>50</sub> 3,000 mg/kg
Solvent Naphtha (Petroleum), Light Aliphatic	Inhalation-Vapor (4 hours)	Rat	LC <sub>50</sub> > 5.2 mg/l
Solvent Naphtha (Petroleum), Light Aliphatic	Ingestion	Rat	LD <sub>50</sub> > 5,000 mg/kg
Hydrocarbons, C6-20, Polymers, Hydrogenated	Dermal	Rat	LD <sub>50</sub> > 2,000 mg/kg
Hydrocarbons, C6-20, Polymers, Hydrogenated	Ingestion	Rat	LD <sub>50</sub> > 5,000 mg/kg
Alpha-Methylstyrene-Vinyltoluene Copolymer	Dermal		LD <sub>50</sub> estimated to be > 5,000 mg/kg
Alpha-Methylstyrene-Vinyltoluene Copolymer	Ingestion		LD <sub>50</sub> estimated to be 2,000 - 5,000 mg/kg
Hydrogenated Styrene-Butadiene Polymer	Dermal		LD <sub>50</sub> estimated to be > 5,000 mg/kg



Hydrogenated Styrene-Butadiene Polymer	Ingestion		LD50 estimated to be > 5,000 mg/kg
Bis(Hydrogenated Tallow Alkyl)Dimethyl Ammonium Salts with Bentonite	Dermal		LD50 estimated to be > 5,000 mg/kg
Bis(Hydrogenated Tallow Alkyl)Dimethyl Ammonium Salts with Bentonite	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 12.6 mg/l
Bis(Hydrogenated Tallow Alkyl)Dimethyl Ammonium Salts with Bentonite	Ingestion	Rat	LD50 > 5,000 mg/kg
Carbon Black	Dermal	Rabbit	LD50 > 3,000 mg/kg
Carbon Black	Ingestion	Rat	LD50 > 8,000 mg/kg
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
Quartz Silica	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz Silica	Ingestion		LD50 estimated to be > 5,000 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

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

Name	Species	Value
Toluene	Rabbit	Irritant
Solvent Naphtha (Petroleum), Light Aliphatic	Rabbit	Irritant
Bis(Hydrogenated Tallow Alkyl)Dimethyl Ammonium Salts with Bentonite	Rat	No significant irritation
Carbon Black	Rabbit	No significant irritation
Methyl Alcohol	Rabbit	Mild irritant
Quartz Silica	Professional judgement	No significant irritation
Ethylbenzene	Rabbit	Mild irritant

#### Serious Eye Damage/Irritation

Name	Species	Value
Toluene	Rabbit	Moderate irritant
Solvent Naphtha (Petroleum), Light Aliphatic	Rabbit	No significant irritation
Bis(Hydrogenated Tallow Alkyl)Dimethyl Ammonium Salts with Bentonite	Rabbit	No significant irritation
Carbon Black	Rabbit	No significant irritation
Methyl Alcohol	Rabbit	Moderate irritant
Ethylbenzene	Rabbit	Moderate irritant

#### Skin Sensitization

Name	Species	Value
Toluene	Guinea pig	Not classified
Methyl Alcohol	Guinea pig	Not classified
Ethylbenzene	Human	Not classified

#### Respiratory Sensitization

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

#### Germ Cell Mutagenicity

Name	Route	Value

Toluene	In Vitro	Not mutagenic
Toluene	In vivo	Not mutagenic
Solvent Naphtha (Petroleum), Light Aliphatic	In Vitro	Not mutagenic
Carbon Black	In Vitro	Not mutagenic
Carbon Black	In vivo	Some positive data exist, but the data are not sufficient 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
Quartz Silica	In Vitro	Some positive data exist, but the data are not sufficient for classification
Quartz Silica	In vivo	Some positive data exist, but the data are not sufficient for classification
Ethylbenzene	In vivo	Not mutagenic
Ethylbenzene	In Vitro	Some positive data exist, but the data are not sufficient for classification

**Carcinogenicity**

Name	Route	Species	Value
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
Solvent Naphtha (Petroleum), Light Aliphatic	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Carbon Black	Dermal	Mouse	Not carcinogenic
Carbon Black	Ingestion	Mouse	Not carcinogenic
Carbon Black	Inhalation	Rat	Carcinogenic
Methyl Alcohol	Inhalation	Multiple animal species	Not carcinogenic
Quartz Silica	Inhalation	Human and animal	Carcinogenic
Ethylbenzene	Inhalation	Multiple animal species	Carcinogenic

**Reproductive Toxicity**

**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
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
Methyl Alcohol	Ingestion	Not classified for male reproduction	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
Ethylbenzene	Inhalation	Not classified for development	Rat	NOAEL 4.3 mg/l	prematuring & during gestation

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

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
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
Solvent Naphtha (Petroleum), Light Aliphatic	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Solvent Naphtha (Petroleum), Light Aliphatic	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Solvent Naphtha (Petroleum), Light Aliphatic	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
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
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	
Ethylbenzene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Toluene	Inhalation	auditory system   nervous system   eyes   olfactory system	Causes damage to organs through 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	Not classified	Human	NOAEL Not available	occupational exposure

		system				
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
Carbon Black	Inhalation	pneumoconiosis	Not classified	Human	NOAEL Not available	occupational exposure
Methyl Alcohol	Inhalation	liver	Not classified	Rat	NOAEL 6.55 mg/l	4 weeks
Methyl Alcohol	Inhalation	respiratory system	Not classified	Rat	NOAEL 13.1 mg/l	6 weeks
Methyl Alcohol	Ingestion	liver   nervous system	Not classified	Rat	NOAEL 2,500 mg/kg/day	90 days
Quartz Silica	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
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 mg/l	103 weeks
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

**Aspiration Hazard**

Name	Value
Toluene	Aspiration hazard
Solvent Naphtha (Petroleum), Light Aliphatic	Aspiration hazard
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. 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

Skin Corrosion or 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**

Toluene

**C.A.S. No**

108-88-3

**% by Wt**

Trade Secret 15 - 40

**15.2. State Regulations**

Contact 3M for more information.

**California Proposition 65**

<b><u>Ingredient</u></b>	<b><u>C.A.S. No.</u></b>	<b><u>Listing</u></b>
SILICA, CRYSTALLINE (AIRBORNE PARTICLES OF RESPIRABLE SIZE)	None	Carcinogen
ARSENIC (INORGANIC ARSENIC COMPOUNDS)	None	Carcinogen
CADMIUM	None	Male reproductive toxin
CADMIUM AND CADMIUM COMPOUNDS	None	Carcinogen
CADMIUM	None	Developmental Toxin
COBALT METAL POWDER	None	Carcinogen
LEAD	None	Female reproductive toxin
LEAD	None	Male reproductive toxin
LEAD	None	Carcinogen
LEAD	None	Developmental Toxin
MERCURY AND MERCURY COMPOUNDS	None	Developmental Toxin
NICKEL (METALLIC)	None	Carcinogen
BERYLLIUM AND BERYLLIUM COMPOUNDS	None	Carcinogen
CHROMIUM (HEXAVALENT COMPOUNDS)	None	Female reproductive toxin
CHROMIUM (HEXAVALENT COMPOUNDS)	None	Male reproductive toxin
CHROMIUM (HEXAVALENT COMPOUNDS)	None	Carcinogen
CHROMIUM (HEXAVALENT COMPOUNDS)	None	Developmental Toxin
ETHYLBENZENE	100-41-4	Carcinogen
TOLUENE	108-88-3	Developmental Toxin
CARBON BLACK (AIRBORNE, UNBOUND PARTICLES OF RESPIRABLE SIZE [ $\leq$ 10 MICROMETERS])	1333-86-4	Carcinogen
METHANOL	67-56-1	Developmental Toxin
BENZENE	71-43-2	Male reproductive toxin
BENZENE	71-43-2	Carcinogen
BENZENE	71-43-2	Developmental Toxin

**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.

**HMIS Hazard Classification**

**Health:** 2 **Flammability:** 3 **Physical Hazard:** 0 **Personal Protection:** X - See PPE section.

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

<b>Document Group:</b>	31-0310-8	<b>Version Number:</b>	2.03
<b>Issue Date:</b>	05/14/19	<b>Supersedes Date:</b>	12/27/17

DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from 3M.

**3M USA SDSs are available at [www.3M.com](http://www.3M.com)**