



Safety Data Sheet

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Document Group:
Issue Date:

24-8221-4
12/02/13

Version Number:
Supercedes Date:

5.00
07/17/12

SECTION 1: Identification

1.1. Product identifier

3M™ Dynatron® Dyna-Pro® Paintable Rubberized Undercoating 523, 544, 6546, 9544

Product Identification Numbers

41-3701-1531-7, 70-0080-0394-2, 70-0080-0395-9, 70-0080-0399-1

1.2. Recommended use and restrictions on use

Recommended use

Automotive, Automobile undercoating.

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

Carcinogenicity: Category 1A.

Serious Eye Damage/Irritation: Category 2B.

Flammable Liquid: Category 2.

Reproductive Toxicity: Category 1B.

Skin Corrosion/Irritation: Category 2.

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

Specific Target Organ Toxicity (central nervous system): Category 3.

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.

IF exposed or concerned: Get medical advice/attention.

In case of fire: Use a fire fighting agent suitable for flammable liquids and solids 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.

2.3. Hazards not otherwise classified

None.

20% of the mixture consists of ingredients of unknown acute dermal toxicity.

31% of the mixture consists of ingredients of unknown acute inhalation toxicity.

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 *
Hydrocarbons, C6-20, Polymers, Hydrogenated	Trade Secret*	5 - 10 Trade Secret *
Alpha-Methylstyrene-Vinyltoluene Copolymer	9017-27-0	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 *
Quartz Silica	14808-60-7	< 0.5 Trade Secret *
Methyl Alcohol	67-56-1	< 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 and solids 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.

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. 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.

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. Ground/bond container and receiving equipment. 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.

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

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Ethylbenzene	100-41-4	Amer Conf of Gov. Indust. Hyg.	TWA:20 ppm	
Ethylbenzene	100-41-4	Chemical Manufacturer Rec Guid	TWA:25 ppm;STEL:75 ppm	
Ethylbenzene	100-41-4	US Dept of Labor - OSHA	TWA:435 mg/m ³ (100 ppm)	
Toluene	108-88-3	Amer Conf of Gov. Indust. Hyg.	TWA:20 ppm	
Toluene	108-88-3	Chemical Manufacturer Rec Guid	STEL:75 ppm	Skin Notation
Toluene	108-88-3	US Dept of Labor - OSHA	TWA:200 ppm;CEIL:300 ppm	
Carbon Black	1333-86-4	Amer Conf of Gov. Indust. Hyg.	TWA(inhalable fraction):3 mg/m ³	
Carbon Black	1333-86-4	Chemical Manufacturer Rec Guid	TWA:0.5 mg/m ³	
Carbon Black	1333-86-4	US Dept of Labor - OSHA	TWA:3.5 mg/m ³	
Quartz Silica	14808-60-7	Amer Conf of Gov. Indust. Hyg.	TWA(respirable fraction):0.025 mg/m ³	
Quartz Silica	14808-60-7	US Dept of Labor - 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.)	
Solvent Naphtha (Petroleum), Light Aliphatic	64742-89-8	Chemical Manufacturer Rec Guid	TWA:300 ppm	
Methyl Alcohol	67-56-1	Amer Conf of Gov. Indust. Hyg.	TWA:200 ppm;STEL:250 ppm	Skin Notation
Methyl Alcohol	67-56-1	US Dept of Labor - OSHA	TWA:260 mg/m ³ (200 ppm)	
Benzene	71-43-2	Amer Conf of Gov. Indust.	TWA:0.5 ppm;STEL:2.5 ppm	Skin Notation

Benzene	71-43-2	Hyg. US Dept of Labor - OSHA	TWA:1 ppm;TWA:10 ppm;STEL:5 ppm;CEIL:25 ppm	29 CFR 1910.1028
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Amer Conf of Gov. Indust. Hyg. : American Conference of Governmental Industrial Hygienists
 American Indust. Hygiene Assoc : American Industrial Hygiene Association
 Chemical Manufacturer Rec Guid : Chemical Manufacturer's Recommended Guidelines
 US Dept of Labor - OSHA : United States Department of Labor - Occupational Safety and Health Administration
 TWA: Time-Weighted-Average
 STEL: Short Term Exposure Limit
 CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment. Use explosion-proof ventilation equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Wear protective gloves and 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. Wear protective gloves.

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

Odor, Color, Grade: Black Solvent

Odor threshold *No Data Available*

pH *No Data Available*

Melting point *No Data Available*

Boiling Point 114 °C

Flash Point 45 °F [Test Method: Closed Cup]

Evaporation rate *No Data Available*

Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	1.1 %
Flammable Limits(UEL)	<i>No Data Available</i>
Vapor Pressure	<i>No Data Available</i>
Vapor Density	<i>No Data Available</i>
Density	0.86 g/ml
Specific Gravity	0.86 [Ref Std: WATER=1]
Solubility in Water	Negligible
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	<i>No Data Available</i>
Decomposition temperature	<i>No Data Available</i>
Viscosity	4,500 - 7,000 centipoise
Hazardous Air Pollutants	37 % weight [Test Method: Calculated]
Volatile Organic Compounds	576 g/l [Test Method: calculated SCAQMD rule 443.1]
Volatile Organic Compounds	67 % weight [Test Method: calculated per CARB title 2]
Percent volatile	67 % weight
VOC Less H₂O & Exempt Solvents	576 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

Heat

Sparks and/or flames

10.5. Incompatible materials

Strong oxidizing agents

Strong acids

10.6. Hazardous decomposition products

Substance

Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be

reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation:

May be harmful if inhaled.

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause target organ effects after inhalation.

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.

Dust created by cutting, grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion:

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

May cause target organ effects after ingestion.

Target Organ Effects:

Single exposure may cause:

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:

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	C.A.S. No.	Class Description	Regulation
Benzene	71-43-2	Cancer hazard	OSHA 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
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
SILICA, CRYSTAL AIRRESP	14808-60-7	Known human carcinogen	National Toxicology Program Carcinogens

Toxicological Data

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		Data not available or insufficient for classification; calculated ATE > 5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		Data not available or insufficient for classification; calculated ATE 28.7 mg/l
Overall product	Ingestion		Data not available or insufficient for classification; calculated ATE > 5,000 mg/kg
Toluene	Dermal	Rat	LD50 12,000 mg/kg
Toluene	Inhalation-Vapor (4 hours)	Rat	LC50 30 mg/l
Toluene	Ingestion	Rat	LD50 2,600 mg/kg
Solvent Naphtha (Petroleum), Light Aliphatic	Dermal	Rabbit	LD50 3,000 mg/kg
Solvent Naphtha (Petroleum), Light Aliphatic	Inhalation-Vapor (4 hours)	Rat	LC50 > 5.2 mg/l
Solvent Naphtha (Petroleum), Light Aliphatic	Ingestion	Rat	LD50 > 5,000 mg/kg
Hydrocarbons, C6-20, Polymers, Hydrogenated	Dermal	Rat	LD50 > 2,000 mg/kg
Hydrocarbons, C6-20, Polymers, Hydrogenated	Ingestion	Rat	LD50 > 5,000 mg/kg
Alpha-Methylstyrene-Vinyltoluene Copolymer	Ingestion		LD50 estimated to be 2,000 - 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	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
Benzene			Data not available or insufficient for classification

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Toluene	Rabbit	Irritant
Solvent Naphtha (Petroleum), Light Aliphatic	Rabbit	Irritant
Hydrocarbons, C6-20, Polymers, Hydrogenated		Data not available or insufficient for classification
Alpha-Methylstyrene-Vinyltoluene Copolymer		Data not available or insufficient for classification
Hydrogenated Styrene-Butadiene Polymer		Data not available or insufficient for classification
Bis(Hydrogenated Tallow Alkyl)Dimethyl Ammonium Salts with Bentonite		Data not available or insufficient for classification
Carbon Black	Rabbit	No significant irritation
Methyl Alcohol	Rabbit	Mild irritant

Quartz Silica		No significant irritation
Ethylbenzene	Rabbit	Mild irritant
Benzene		Data not available or insufficient for classification

Serious Eye Damage/Irritation

Name	Species	Value
Toluene	Rabbit	Moderate irritant
Solvent Naphtha (Petroleum), Light Aliphatic	Rabbit	No significant irritation
Hydrocarbons, C6-20, Polymers, Hydrogenated		Data not available or insufficient for classification
Alpha-Methylstyrene-Vinyltoluene Copolymer		Data not available or insufficient for classification
Hydrogenated Styrene-Butadiene Polymer		Data not available or insufficient for classification
Bis(Hydrogenated Tallow Alkyl)Dimethyl Ammonium Salts with Bentonite		Data not available or insufficient for classification
Carbon Black	Rabbit	No significant irritation
Methyl Alcohol	Rabbit	Moderate irritant
Quartz Silica		Data not available or insufficient for classification
Ethylbenzene	Rabbit	Moderate irritant
Benzene		Data not available or insufficient for classification

Skin Sensitization

Name	Species	Value
Toluene	Guinea pig	Not sensitizing
Solvent Naphtha (Petroleum), Light Aliphatic		Data not available or insufficient for classification
Hydrocarbons, C6-20, Polymers, Hydrogenated		Data not available or insufficient for classification
Alpha-Methylstyrene-Vinyltoluene Copolymer		Data not available or insufficient for classification
Hydrogenated Styrene-Butadiene Polymer		Data not available or insufficient for classification
Bis(Hydrogenated Tallow Alkyl)Dimethyl Ammonium Salts with Bentonite		Data not available or insufficient for classification
Carbon Black		Data not available or insufficient for classification
Methyl Alcohol	Guinea pig	Not sensitizing
Quartz Silica		Data not available or insufficient for classification
Ethylbenzene	Human	Not sensitizing
Benzene		Data not available or insufficient for classification

Respiratory Sensitization

Name	Species	Value
Toluene		Data not available or insufficient for classification
Solvent Naphtha (Petroleum), Light Aliphatic		Data not available or insufficient for classification
Hydrocarbons, C6-20, Polymers, Hydrogenated		Data not available or insufficient for classification
Alpha-Methylstyrene-Vinyltoluene Copolymer		Data not available or insufficient for classification
Hydrogenated Styrene-Butadiene Polymer		Data not available or insufficient for classification
Bis(Hydrogenated Tallow Alkyl)Dimethyl Ammonium Salts with Bentonite		Data not available or insufficient for classification
Carbon Black		Data not available or insufficient for classification
Methyl Alcohol		Data not available or insufficient for classification
Quartz Silica		Data not available or insufficient for classification
Ethylbenzene		Data not available or insufficient for classification
Benzene		Data not available or insufficient 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
Hydrocarbons, C6-20, Polymers, Hydrogenated		Data not available or insufficient for classification
Alpha-Methylstyrene-Vinyltoluene Copolymer		Data not available or insufficient for classification
Hydrogenated Styrene-Butadiene Polymer		Data not available or insufficient for classification
Bis(Hydrogenated Tallow Alkyl)Dimethyl Ammonium Salts with Bentonite		Data not available or insufficient for classification
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

Quartz Silica	In vivo	sufficient for classification
Ethylbenzene	In vivo	Some positive data exist, but the data are not sufficient for classification
Ethylbenzene	In Vitro	Not mutagenic
Benzene		Some positive data exist, but the data are not sufficient for classification
		Data not available or insufficient 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
Hydrocarbons, C6-20, Polymers, Hydrogenated			Data not available or insufficient for classification
Alpha-Methylstyrene-Vinyltoluene Copolymer			Data not available or insufficient for classification
Hydrogenated Styrene-Butadiene Polymer			Data not available or insufficient for classification
Bis(Hydrogenated Tallow Alkyl)Dimethyl Ammonium Salts with Bentonite			Data not available or insufficient 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
Benzene			Data not available or insufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Toluene	Inhalation	Some positive female reproductive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Toluene	Inhalation	Some positive male reproductive data exist, but the data are not sufficient for classification	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
Solvent Naphtha (Petroleum), Light Aliphatic		Data not available or insufficient for classification			
Hydrocarbons, C6-20, Polymers, Hydrogenated		Data not available or insufficient for classification			
Alpha-Methylstyrene-Vinyltoluene Copolymer		Data not available or insufficient for classification			
Hydrogenated Styrene-Butadiene Polymer		Data not available or insufficient for classification			
Bis(Hydrogenated Tallow Alkyl)Dimethyl Ammonium Salts with Bentonite		Data not available or insufficient for classification			
Carbon Black		Data not available or insufficient for classification			
Methyl Alcohol	Ingestion	Some positive male reproductive data exist, but the data are not sufficient for	Rat	NOAEL 1,600	21 days

		classification		mg/kg/day	
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
Quartz Silica		Data not available or insufficient for classification			
Ethylbenzene	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 4.3 mg/l	prematuring & during gestation
Benzene		Data not available or insufficient for classification			

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
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	Some positive data exist, but the data are not sufficient for classification	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		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	
Hydrocarbons, C6-20, Polymers, Hydrogenated			Data not available or insufficient for classification			
Alpha-Methylstyrene-Vinyltoluene Copolymer			Data not available or insufficient for classification			
Hydrogenated Styrene-Butadiene Polymer			Data not available or insufficient for classification			
Bis(Hydrogenated Tallow Alkyl)Dimethyl Ammonium Salts with Bentonite			Data not available or insufficient for classification			
Methyl Alcohol	Inhalation	blindness	Causes damage to organs	Human	NOAEL Not available	occupational exposure
Methyl Alcohol	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	not available
Methyl Alcohol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	6 hours
Methyl Alcohol	Ingestion	blindness	Causes damage to organs	Human	NOAEL Not available	poisoning and/or abuse
Methyl Alcohol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
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	
Benzene			Data not available or insufficient for classification			

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	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 11.3 mg/l	15 weeks
Toluene	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.1 mg/l	4 weeks
Toluene	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL Not available	20 days
Toluene	Inhalation	bone, teeth, nails, and/or hair	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 1.1 mg/l	8 weeks
Toluene	Inhalation	hematopoietic system vascular system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
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	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 600 mg/kg/day	14 days
Toluene	Ingestion	endocrine system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 105 mg/kg/day	28 days
Toluene	Ingestion	immune system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 105 mg/kg/day	4 weeks
Hydrocarbons, C6-20, Polymers, Hydrogenated			Data not available or insufficient for classification			
Alpha-Methylstyrene-Vinyltoluene Copolymer			Data not available or insufficient for classification			
Hydrogenated Styrene-Butadiene Polymer			Data not available or insufficient for classification			
Bis(Hydrogenated Tallow Alkyl)Dimethyl Ammonium Salts with Bentonite			Data not available or insufficient for classification			
Carbon Black	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Methyl Alcohol	Inhalation	liver	All data are negative	Rat	NOAEL 6.55 mg/l	4 weeks
Methyl Alcohol	Inhalation	respiratory system	All data are negative	Rat	NOAEL 13.1 mg/l	6 weeks
Methyl Alcohol	Ingestion	liver nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,500 mg/kg/day	90 days
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	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
Benzene			Data not available or insufficient for classification			

Aspiration Hazard

Name	Value
Toluene	Aspiration hazard
Solvent Naphtha (Petroleum), Light Aliphatic	Aspiration hazard
Hydrocarbons, C6-20, Polymers, Hydrogenated	Not an aspiration hazard
Alpha-Methylstyrene-Vinyltoluene Copolymer	Not an aspiration hazard
Hydrogenated Styrene-Butadiene Polymer	Not an aspiration hazard
Bis(Hydrogenated Tallow Alkyl)Dimethyl Ammonium Salts with Bentonite	Not an aspiration hazard
Carbon Black	Not an aspiration hazard
Methyl Alcohol	Not an aspiration hazard
Quartz Silica	Not an aspiration hazard
Ethylbenzene	Aspiration hazard
Benzene	Not an aspiration hazard

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

SECTION 12: Ecological information

Ecotoxicological information

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

Chemical fate information

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

SECTION 13: Disposal considerations

13.1. Disposal methods

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

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.

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.

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>
Toluene	108-88-3	Trade Secret 15 - 40

15.2. State Regulations

Contact 3M for more information.

California Proposition 65

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Classification</u>
SILICA, CRYSTALLINE (AIRBORNE PARTICLES OF RESPIRABLE SIZE)	None	Carcinogen
Ethylbenzene	100-41-4	Carcinogen
Toluene	108-88-3	Female reproductive toxin
Toluene	108-88-3	Developmental Toxin
Carbon Black	1333-86-4	Carcinogen
Methyl Alcohol	67-56-1	Developmental Toxin
Benzene	71-43-2	Male reproductive toxin
Benzene	71-43-2	Carcinogen
Benzene	71-43-2	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.

HMIS Hazard Classification

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

Hazardous Material Identification System (HMIS® III) 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® III ratings are to be used with a fully implemented HMIS® III program. HMIS® is a registered mark of the American Coatings Association (ACA).

Document Group:	24-8221-4	Version Number:	5.00
Issue Date:	12/02/13	Supercedes Date:	07/17/12

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