

Safety Data Sheet

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 04/09/20
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 09/04/18

SECTION 1: Identification

1.1. Product identifier

3MTM Foaming Engine Degreaser, 08899

Product Identification Numbers

ID Number UPC ID Number UPC

60-4550-4625-4 60-4550-5415-9

60-4550-6573-4 000511350088999

7000028274, 7100039391

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 Aerosol: Category 1. Gas Under Pressure: Liquefied gas.

Serious Eye Damage/Irritation: Category 2A.

Skin Corrosion/Irritation: Category 2. Aspiration Hazard: Category 1. Carcinogenicity: Category 2.

Specific Target Organ Toxicity (single exposure): Category 1. Specific Target Organ Toxicity (single exposure): Category 3. Specific Target Organ Toxicity (repeated exposure): Category 1.

2.2. Label elements

Signal word

Danger

Symbols

Flame | Gas cylinder | Exclamation mark | Health Hazard |





Hazard Statements

Extremely flammable aerosol.

Contains gas under pressure; may explode if heated.

Causes serious eye irritation.

Causes skin irritation.

May be fatal if swallowed and enters airways.

May cause drowsiness or dizziness.

Suspected of causing cancer.

Causes damage to organs:

blood or blood-forming organs |

cardiovascular system

Causes damage to organs through prolonged or repeated exposure:

blood or blood-forming organs

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.

Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

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.

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Response:

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

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.

Do NOT induce vomiting.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

IF exposed or concerned: Get medical advice/attention. Specific treatment (see Notes to Physician on this label).

Storage:

Protect from sunlight. Do not expose to temperatures exceeding 50C/122F.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Disposal:

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

Notes to Physician:

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

2% of the mixture consists of ingredients of unknown acute dermal toxicity.

15% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Water	7732-18-5	40 - 70 Trade Secret *
2-Butoxyethanol	111-76-2	7 - 13 Trade Secret *
Heavy Aromatic Solvent Naphtha	64742-94-5	5 - 10 Trade Secret *
Fatty Acids	Trade Secret*	3 - 7 Trade Secret *
1,2,4-Trimethylbenzene	95-63-6	1 - 5 Trade Secret *
Butane	106-97-8	1 - 5 Trade Secret *
Ethoxylated Lauryl Alcohol	9002-92-0	1 - 5 Trade Secret *
Light Aromatic Solvent Naphtha	64742-95-6	1 - 5 Trade Secret *
Propane	74-98-6	1 - 5 Trade Secret *
Ammonium Hydroxide	1336-21-6	< 3 Trade Secret *
Glycol Ethers	25498-49-1	0.5 - 1.5 Trade Secret *
Mesitylene	108-67-8	0.5 - 1.5 Trade Secret *
Naphthalene	91-20-3	0.5 - 1.5 Trade Secret *
Cumene	98-82-8	<= 0.5 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. 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. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

If Swallowed:

Do not induce vomiting. Get immediate 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

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Use a fire fighting agent suitable for the surrounding fire.

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

Substance
Carbon monoxide
Carbon dioxide

Condition

During Combustion
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. 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

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

If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available. Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material

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as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not use in a confined area with minimal air exchange. Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. 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 contact with oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. 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
Natural gas	106-97-8	ACGIH	Limit value not established:	simple asphyxiant
Butane	106-97-8	ACGIH	STEL:1000 ppm	
Benzene, trimethyl-	108-67-8	ACGIH	TWA:25 ppm	
2-Butoxyethanol	111-76-2	OSHA	TWA:240 mg/m3(50 ppm)	SKIN
2-Butoxyethanol	111-76-2	ACGIH	TWA:20 ppm	A3: Confirmed animal
-				carcin.
AMMONIA RELEASED FROM	1336-21-6	ACGIH	TWA:25 ppm;STEL:35 ppm	
AMMONIUM				
HYDROXIDE/AQUEOUS				
AMMONIA SOLUTIONS				
AMMONIA RELEASED FROM	1336-21-6	OSHA	TWA:35 mg/m3(50 ppm)	
AMMONIUM				
HYDROXIDE/AQUEOUS				
AMMONIA SOLUTIONS				
Propane	74-98-6	ACGIH	Limit value not established:	simple asphyxiant
Propane	74-98-6	OSHA	TWA:1800 mg/m3(1000 ppm)	
Naphthalene	91-20-3	ACGIH	TWA:10 ppm	A3: Confirmed animal
				carcin., Danger of
				cutaneous absorption
Naphthalene	91-20-3	OSHA	TWA:50 mg/m3(10 ppm)	
Benzene, trimethyl-	95-63-6	ACGIH	TWA:25 ppm	
Cumene	98-82-8	OSHA	TWA:245 mg/m3(50 ppm)	SKIN
Cumene	98-82-8	ACGIH	TWA:50 ppm	

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.

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:

Full Face Shield

Indirect Vented Goggles

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended: Polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece supplied-air respirator

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical stateLiquidColorColorless

Specific Physical Form:AerosolOdorAmmoniacalOdor thresholdNo Data AvailablepH9.5

Melting point
No Data Available
Soiling Point
<=469 °F

Flash Point < 0 °F [Test Method:Closed Cup]

Evaporation rate

Flammability (solid, gas)

Flammable Limits(LEL)

Flammable Limits(UEL)

Vapor Pressure

Vapor Density

No Data Available

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Specific Gravity 0.89 [Ref Std:WATER=1]

Solubility In WaterNo Data AvailableSolubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data AvailableAutoignition temperatureNo Data AvailableDecomposition temperatureNot ApplicableViscosityNo Data Available

Hazardous Air Pollutants0.179 lb HAPS/lb solids [Test Method: Calculated]Volatile Organic Compounds34.1 % weight [Test Method: calculated per CARB title 2]Volatile Organic Compounds312 g/l [Test Method: calculated SCAQMD rule 443.1]VOC Less H2O & Exempt Solvents598 g/l [Test Method: calculated SCAQMD rule 443.1]

SECTION 10: Stability and reactivity

10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Substance

None known.

Condition

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:

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. May cause additional health effects (see below).

Eye Contact:

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

Ingestion:

May be harmful if swallowed.

Chemical (Aspiration) Pneumonitis: Signs/symptoms may include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish colored skin (cyanosis), and may be fatal.

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.

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

Single exposure, above recommended guidelines, may cause:

Cardiac Sensitization: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

Prolonged or repeated exposure may cause target organ effects:

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

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

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

Ingredient	CAS No.	Class Description	Regulation
Cumene	98-82-8	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Cumene	98-82-8	Anticipated human carcinogen	National Toxicology Program Carcinogens
Naphthalene	91-20-3	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Naphthalene	91-20-3	Anticipated human carcinogen	National Toxicology Program Carcinogens

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

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Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation- Vapor(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE2,000 - 5,000 mg/kg
2-Butoxyethanol	Dermal	Guinea pig	LD50 > 2,000 mg/kg
2-Butoxyethanol	Inhalation- Vapor (4 hours)	Guinea pig	LC50 > 2.6 mg/l
2-Butoxyethanol	Ingestion	Guinea pig	LD50 1,414 mg/kg
Heavy Aromatic Solvent Naphtha	Dermal	Rabbit	LD50 > 2,000 mg/kg
Heavy Aromatic Solvent Naphtha	Ingestion	Rat	LD50 > 5,000 mg/kg
Propane	Inhalation- Gas (4 hours)	Rat	LC50 > 200,000 ppm
Fatty Acids	Dermal	Guinea pig	LD50 > 3,000 mg/kg
Fatty Acids	Ingestion	Rat	LD50 57,000 mg/kg
1,2,4-Trimethylbenzene	Dermal	Rabbit	LD50 > 3,160 mg/kg
1,2,4-Trimethylbenzene	Inhalation- Vapor (4 hours)	Rat	LC50 18 mg/l
1,2,4-Trimethylbenzene	Ingestion	Rat	LD50 3,400 mg/kg
Butane	Inhalation- Gas (4 hours)	Rat	LC50 277,000 ppm
Ethoxylated Lauryl Alcohol	Dermal	Rat	LD50 > 2,000 mg/kg
Ethoxylated Lauryl Alcohol	Ingestion	Rat	LD50 1,000 mg/kg
Ammonium Hydroxide	Ingestion	Rat	LD50 350 mg/kg
Light Aromatic Solvent Naphtha	Dermal	Rabbit	LD50 > 2,000 mg/kg
Light Aromatic Solvent Naphtha	Inhalation- Vapor (4 hours)	Rat	LC50 > 5.2 mg/l
Light Aromatic Solvent Naphtha	Ingestion	Rat	LD50 > 5,000 mg/kg
Mesitylene	Dermal	Rabbit	LD50 > 3,160 mg/kg
Mesitylene	Inhalation- Vapor (4 hours)	Rat	LC50 18 mg/l
Mesitylene	Ingestion	Rat	LD50 3,400 mg/kg
Naphthalene	Dermal	Human	LD50 estimated to be 2,000 - 5,000 mg/kg
Naphthalene	Inhalation- Vapor	Human	LC50 estimated to be 20 - 50 mg/l
Naphthalene	Ingestion	Human	LD50 estimated to be 300 - 2,000 mg/kg
Glycol Ethers	Dermal	Rabbit	LD50 > 19,340 mg/kg
Glycol Ethers	Inhalation- Dust/Mist	Rat	LC50 estimated to be 5 - 12.5 mg/l
Glycol Ethers	Ingestion	Rat	LD50 3,300 mg/kg
Cumene	Dermal	Rabbit	LD50 > 3,160 mg/kg
Cumene	Inhalation- Vapor (4 hours)	Rat	LC50 39.4 mg/l
Cumene	Ingestion	Rat	LD50 1,400 mg/kg

 \overline{ATE} = acute toxicity estimate

Skin Corrosion/Irritation

Skiii Culi usiuii/11 1 itatiuii		
Name	Species	Value
2-Butoxvethanol	Rabbit	Irritant
Heavy Aromatic Solvent Naphtha	Rabbit	Irritant
Propane	Rabbit	Minimal irritation
Fatty Acids	Rabbit	Minimal irritation
1,2,4-Trimethylbenzene	Rabbit	Irritant

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Butane	Professio	No significant irritation
	nal	
	judgeme	
	nt	
Ethoxylated Lauryl Alcohol	Rabbit	No significant irritation
Ammonium Hydroxide	Rabbit	Corrosive
Light Aromatic Solvent Naphtha	Rabbit	Irritant
Mesitylene	Rabbit	Irritant
Naphthalene	Rabbit	Minimal irritation
Cumene	Rabbit	Minimal irritation

Serious Eye Damage/Irritation

Name	Species	Value
2-Butoxyethanol	Rabbit	Severe irritant
Heavy Aromatic Solvent Naphtha	Rabbit	Mild irritant
Propane	Rabbit	Mild irritant
Fatty Acids	Rabbit	Mild irritant
1,2,4-Trimethylbenzene	Rabbit	Mild irritant
Butane	Rabbit	No significant irritation
Ethoxylated Lauryl Alcohol	Rabbit	Severe irritant
Ammonium Hydroxide	Rabbit	Corrosive
Light Aromatic Solvent Naphtha	Rabbit	Mild irritant
Mesitylene	Rabbit	Mild irritant
Naphthalene	Rabbit	No significant irritation
Cumene	Rabbit	Mild irritant

Skin Sensitization

Name	Species	Value
2-Butoxyethanol	Guinea	Not classified
	pig	
Heavy Aromatic Solvent Naphtha	Guinea	Not classified
-	pig	
1,2,4-Trimethylbenzene	Guinea	Not classified
	pig	
Ethoxylated Lauryl Alcohol	Human	Not classified
	and	
	animal	
Light Aromatic Solvent Naphtha	Guinea	Not classified
	pig	
Mesitylene	Guinea	Not classified
	pig	
Cumene	Guinea	Not classified
	pig	

Respiratory SensitizationFor the components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
2-Butoxyethanol	In Vitro	Some positive data exist, but the data are not sufficient for classification
Propane	In Vitro	Not mutagenic
Fatty Acids	In Vitro	Some positive data exist, but the data are not sufficient for classification
1,2,4-Trimethylbenzene	In Vitro	Not mutagenic
Butane	In Vitro	Not mutagenic
Ethoxylated Lauryl Alcohol	In Vitro	Not mutagenic
Ethoxylated Lauryl Alcohol	In vivo	Not mutagenic
Mesitylene	In Vitro	Not mutagenic
Cumene	In Vitro	Not mutagenic
Cumene	In vivo	Not mutagenic

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Name	Route	Species	Value
2-Butoxyethanol	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Heavy Aromatic Solvent Naphtha	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Fatty Acids	Dermal	Mouse	Not carcinogenic
Fatty Acids	Ingestion	Rat	Not carcinogenic
Fatty Acids	Not Specified	Multiple animal species	Not carcinogenic
Light Aromatic Solvent Naphtha	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
Naphthalene	Inhalation	Multiple animal species	Carcinogenic
Cumene	Inhalation	Multiple animal species	Carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
2-Butoxyethanol	Dermal	Not classified for development	Rat	NOAEL 1,760 mg/kg/day	during gestation
2-Butoxyethanol	Ingestion	Not classified for development	Rat	NOAEL 100 mg/kg/day	during organogenesi s
2-Butoxyethanol	Inhalation	Not classified for development	Multiple animal species	NOAEL 0.48 mg/l	during organogenesi s
1,2,4-Trimethylbenzene	Inhalation	Not classified for female reproduction	Rat	NOAEL 1.2 mg/l	3 months
1,2,4-Trimethylbenzene	Inhalation	Not classified for male reproduction	Rat	NOAEL 1.2 mg/l	3 months
1,2,4-Trimethylbenzene	Inhalation	Not classified for development	Rat	NOAEL 1.5 mg/l	during gestation
Light Aromatic Solvent Naphtha	Inhalation	Not classified for female reproduction	Rat	NOAEL 1,500 ppm	2 generation
Light Aromatic Solvent Naphtha	Inhalation	Not classified for male reproduction	Rat	NOAEL 1,500 ppm	2 generation
Light Aromatic Solvent Naphtha	Inhalation	Not classified for development	Rat	NOAEL 500 ppm	2 generation
Mesitylene	Inhalation	Not classified for female reproduction	Rat	NOAEL 1.2 mg/l	3 months
Mesitylene	Inhalation	Not classified for male reproduction	Rat	NOAEL 1.2 mg/l	3 months
Mesitylene	Inhalation	Not classified for development	Rat	NOAEL 1.5 mg/l	during gestation
Cumene	Inhalation	Not classified for development	Rabbit	NOAEL 11.3 mg/l	during organogenesi s

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
2-Butoxyethanol	Dermal	endocrine system	Not classified	Rabbit	NOAEL 902	6 hours
					mg/kg	
2-Butoxyethanol	Dermal	liver	Not classified	Rabbit	LOAEL 72	not available

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					mg/kg	
2-Butoxyethanol	Dermal	kidney and/or bladder	Not classified	Rabbit	LOAEL 451 mg/kg	6 hours
2-Butoxyethanol	Dermal	blood	Not classified	Multiple animal species	NOAEL Not available	
2-Butoxyethanol	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
2-Butoxyethanol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
2-Butoxyethanol	Inhalation	blood	Not classified	Multiple animal species	NOAEL Not available	
2-Butoxyethanol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
2-Butoxyethanol	Ingestion	blood	Not classified	Multiple animal species	NOAEL Not available	
2-Butoxyethanol	Ingestion	kidney and/or bladder	Not classified	Human	NOAEL Not available	poisoning and/or abuse
Heavy Aromatic Solvent Naphtha	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Heavy Aromatic Solvent Naphtha	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Professio nal judgeme nt	NOAEL Not available	
Heavy Aromatic Solvent Naphtha	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
Propane	Inhalation	cardiac sensitization	Causes damage to organs	Human	NOAEL Not available	
Propane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Propane	Inhalation	respiratory irritation	Not classified	Human	NOAEL Not available	
1,2,4-Trimethylbenzene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
1,2,4-Trimethylbenzene	Inhalation	respiratory irritation	May cause respiratory irritation	official classifica tion	NOAEL Not available	
1,2,4-Trimethylbenzene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
Butane	Inhalation	cardiac sensitization	Causes damage to organs	Human	NOAEL Not available	
Butane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Butane	Inhalation	heart	Not classified	Dog	NOAEL 5,000 ppm	25 minutes
Butane	Inhalation	respiratory irritation	Not classified	Rabbit	NOAEL Not available	
Ethoxylated Lauryl Alcohol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Ammonium Hydroxide	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL not available	
Light Aromatic Solvent Naphtha	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme	NOAEL Not available	

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Light Aromatic Solvent Naphtha	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Professio nal judgeme nt	NOAEL Not available	
Light Aromatic Solvent Naphtha	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
Mesitylene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Mesitylene	Inhalation	respiratory irritation	May cause respiratory irritation	official classifica tion	NOAEL Not available	
Mesitylene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
Naphthalene	Ingestion	blood	Causes damage to organs	Human	NOAEL Not available	poisoning and/or abuse
Cumene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not available
Cumene	Inhalation	respiratory irritation	May cause respiratory irritation	Human	LOAEL 0.2 mg/l	occupational exposure
Cumene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not available

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
2-Butoxyethanol	Dermal	blood	Not classified	Multiple animal species	NOAEL Not available	not available
2-Butoxyethanol	Dermal	endocrine system	Not classified	Rabbit	NOAEL 150 mg/kg/day	90 days
2-Butoxyethanol	Inhalation	liver	Not classified	Rat	NOAEL 2.4 mg/l	14 weeks
2-Butoxyethanol	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 0.15 mg/l	14 weeks
2-Butoxyethanol	Inhalation	blood	Not classified	Rat	LOAEL 0.15 mg/l	6 months
2-Butoxyethanol	Inhalation	endocrine system	Not classified	Dog	LOAEL 1.9 mg/l	8 days
2-Butoxyethanol	Ingestion	blood	Not classified	Rat	LOAEL 69 mg/kg/day	13 weeks
2-Butoxyethanol	Ingestion	kidney and/or bladder	Not classified	Multiple animal species	NOAEL Not available	not available
Fatty Acids	Ingestion	liver immune system	Not classified	Rat	NOAEL 2,250 mg/kg/day	108 weeks
Fatty Acids	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 2,550 mg/kg/day	108 weeks
1,2,4-Trimethylbenzene	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.5 mg/l	3 months
1,2,4-Trimethylbenzene	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.1 mg/l	3 months
1,2,4-Trimethylbenzene	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
1,2,4-Trimethylbenzene	Inhalation	liver kidney and/or	Not classified	Rat	NOAEL 1.2	3 months

		bladder heart endocrine system			mg/l	
		gastrointestinal tract				
1,2,4-Trimethylbenzene	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 600 mg/kg/day	14 days
1,2,4-Trimethylbenzene	Ingestion	liver immune system kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
Butane	Inhalation	kidney and/or bladder blood	Not classified	Rat	NOAEL 4,489 ppm	90 days
Ethoxylated Lauryl Alcohol	Ingestion	gastrointestinal tract hematopoietic system liver nervous system kidney and/or bladder	Not classified	Rat	NOAEL 590 mg/kg/day	28 days
Mesitylene	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.5 mg/l	3 months
Mesitylene	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.1 mg/l	3 months
Mesitylene	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Mesitylene	Inhalation	liver kidney and/or bladder heart endocrine system gastrointestinal tract immune system	Not classified	Rat	NOAEL 1.2 mg/l	3 months
Mesitylene	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 600 mg/kg/day	14 days
Mesitylene	Ingestion	liver immune system kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
Naphthalene	Dermal	blood	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Naphthalene	Dermal	eyes	Not classified	Human	NOAEL Not available	occupational exposure
Naphthalene	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.01 mg/l	13 weeks
Naphthalene	Inhalation	blood	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Naphthalene	Inhalation	eyes	Not classified	Human	NOAEL Not available	occupational exposure
Naphthalene	Ingestion	blood	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Naphthalene	Ingestion	eyes	May cause damage to organs though prolonged or repeated exposure	Rabbit	LOAEL 500 mg/kg/day	15 days
Cumene	Inhalation	auditory system endocrine system hematopoietic system liver nervous system eyes	Not classified	Rat	NOAEL 59 mg/l	13 weeks
Cumene	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 4.9 mg/l	13 weeks
Cumene	Inhalation	respiratory system	Not classified	Rat	NOAEL 59 mg/l	13 weeks
Cumene	Ingestion	kidney and/or bladder heart endocrine system hematopoietic system liver respiratory system	Not classified	Rat	NOAEL 769 mg/kg/day	6 months

Aspiration Hazard

Name	Value
Heavy Aromatic Solvent Naphtha	Aspiration hazard
1,2,4-Trimethylbenzene	Aspiration hazard
Light Aromatic Solvent Naphtha	Aspiration hazard
Mesitylene	Aspiration hazard
Cumene	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. Facility must be capable of handling aerosol cans. 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.

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.

FPCRA 311/312 Hazard Classifications

EPCKA 311/312 Hazaru Ciassifications:
Physical Hazards
Flammable (gases, aerosols, liquids, or solids)
Gas under pressure

Health Hazards	
Aspiration Hazard	
Carcinogenicity	

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3MTM	Foaming	Engine	Degreaser,	08899

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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):

<u>Ingredient</u>	C.A.S. No	<u>% by Wt</u>
1,2,4-Trimethylbenzene	95-63-6	Trade Secret 1 - 5
Ammonium Hydroxide (AMMONIA	1336-21-6	< 3
COMPOUNDS)		
2-Butoxyethanol (GLYCOL ETHERS)	111-76-2	7 - 13
Naphthalene	91-20-3	Trade Secret 0.5 - 1.5
Cumene	98-82-8	Trade Secret ≤ 0.5

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

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

SECTION 16: Other information

NFPA Hazard Classification

Health: 2 Flammability: 3 Instability: 0 Special Hazards: None

Aerosol Storage Code: 1

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: *4 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).

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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.

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