



Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

3M™ Industrial Cleaner, Aerosol

Product Identification Numbers

UU-0094-8305-6 UU-0094-9107-5

7100178336 7100178338

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Industrial use.

1.3. Details of the supplier of the safety data sheet

Address: 3M Ireland Limited, The Iveagh Building, The Park, Carrickmines, Dublin 18.
Telephone: +353 1 280 3555
E Mail: tox.uk@mmm.com
Website: www.3M.com

1.4. Emergency telephone number

Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone Number: +353 (0)1 809 2166

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

The health and environmental classifications of this material have been derived using the calculation method, except in cases where test data are available or the physical form impacts classification. Classification(s) based on test data or physical form are noted below, if applicable.

CLASSIFICATION:

Aerosol, Category 1 - Aerosol 1; H222, H229
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315

Skin Sensitization, Category 1 - Skin Sens. 1; H317
Aspiration Hazard, Category 1 - Asp. Tox. 1; H304
Hazardous to the Aquatic Environment (Acute), Category 1 - Aquatic Acute 1; H400
Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

2.2. Label elements

CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

DANGER.

Symbols

GHS02 (Flame) |GHS07 (Exclamation mark) |GHS08 (Health Hazard) |GHS09 (Environment) |

Pictograms



Ingredients:

Ingredient	CAS Nbr	EC No.	% by Wt
(R)-p-mentha-1,8-diene	5989-27-5	227-813-5	80 - 90

HAZARD STATEMENTS:

H222	Extremely flammable aerosol.
H229	Pressurised container: may burst if heated.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H304	May be fatal if swallowed and enters airways.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P280E	Wear protective gloves.

Response:

P301 + P310	IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.
P331	Do NOT induce vomiting.

Storage:

P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
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Notes on labelling

Updated per Regulation (EC) No. 648/2004 on detergents.

2.3. Other hazards

None known.

This material does not contain any substances that are assessed to be a PBT or vPvB

SECTION 3: Composition/information on ingredients**3.1. Substances**

Not applicable

3.2. Mixtures

Ingredient	Identifier(s)	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
(R)-p-mentha-1,8-diene	(CAS-No.) 5989-27-5 (EC-No.) 227-813-5 (REACH-No.) 01-2119529223-47	80 - 90	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Acute 1, H400,M=1 Aquatic Chronic 3, H412 Nota C
propane	(CAS-No.) 74-98-6 (EC-No.) 200-827-9 (REACH-No.) 01-2119486944-21	10 - 15	Flam. Gas 1A, H220 Liquified gas, H280 Nota U
7-methyl-3-methyleneocta-1,6-diene	(CAS-No.) 123-35-3 (EC-No.) 204-622-5	< 3	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400,M=1 Aquatic Chronic 3, H412

Please see section 16 for the full text of any H statements referred to in this section

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

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

If exposed, flush eyes with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms develop, get medical attention.

If swallowed

Do not induce vomiting. Get immediate medical attention.

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

The most important symptoms and effects based on the CLP classification include:

Irritation to the skin (localized redness, swelling, itching, and dryness). Allergic skin reaction (redness, swelling, blistering, and itching). Aspiration pneumonitis (coughing, gasping, choking, burning of the mouth, and difficulty breathing).

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. 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

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During combustion.
Carbon dioxide	During combustion.

5.3. Advice 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 vapours, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapours 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 dykes 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 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 authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial/occupational use only. Not for consumer sale or 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. Do not pierce or burn, even after use. Do not breathe dust/fume/gas/mist/vapours/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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (eg. gloves, respirators...) as required.

7.2. Conditions for safe storage including any incompatibilities

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store away from heat. Store away from acids. Store away from oxidising agents.

7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Occupational exposure limits**

No occupational exposure limit values exist for any of the components listed in Section 3 of this Safety Data Sheet.

Biological limit values

No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

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/vapours/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:

Indirect vented goggles.

Applicable Norms/Standards

Use eye protection conforming to EN 166

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:

Material	Thickness (mm)	Breakthrough Time
Polymer laminate	>0.30	4-8 hours

The glove data presented are based on the substance driving dermal toxicity and the conditions present at the time of testing.

Breakthrough time may be altered when the glove is subjected to use conditions that place additional stress on the glove.

Applicable Norms/Standards

Use gloves tested to EN 374

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - 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 vapours

Half facepiece or full facepiece supplied-air respirator

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

Applicable Norms/Standards

Use a respirator conforming to EN 140 or EN 136

Use a respirator conforming to EN 140 or EN 136: filter type A

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Aerosol
Colour	Colourless, Light Yellow
Odor	Citrus
Odour threshold	<i>Not applicable.</i>
Melting point/freezing point	<i>Not applicable.</i>
Boiling point/boiling range	154 °C [<i>Details:initial temp.</i>]
Flammability	Flammable Aerosol: Category 1.
Flammable Limits(LEL)	0.7 %
Flammable Limits(UEL)	6.1 %
Flash point	46 °C [<i>Test Method:Closed Cup</i>] [<i>Details:Pensky-Martens</i>]
Autoignition temperature	273 °C
Decomposition temperature	<i>Not applicable.</i>
pH	<i>substance/mixture is non-polar/aprotic</i>
Kinematic Viscosity	<i>Not applicable.</i>
Water solubility	<i>Not applicable.</i>
Solubility- non-water	Negligible
Partition coefficient: n-octanol/water	<i>Not applicable.</i>
Vapour pressure	0.27 kPa [<i>Details:room temperature</i>]
Density	0.85 g/cm ³
Relative density	0.85 [<i>Ref Std:WATER=1</i>]
Relative Vapour Density	<i>Not applicable.</i>
Particle Characteristics	<i>Not applicable.</i>

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds

15 - 20 %

Evaporation rate

Not applicable.

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 polymerisation will not occur.

10.4 Conditions to avoid

Heat.

Sparks and/or flames.

10.5 Incompatible materials

Not determined

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 agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from internal hazard assessments.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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 localised redness, swelling, itching, dryness, cracking, blistering, and pain. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye contact

Contact with the eyes during product use is not expected to result in significant irritation.

Ingestion

Chemical (aspiration) pneumonitis: Signs/symptoms may include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish coloured skin (cyanosis), and may be fatal. Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

Single exposure, above recommended guidelines, may cause: Cardiac Sensitization: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

Carcinogenicity:

Contains a chemical or chemicals which can cause 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	Inhalation-Vapour(4 hr)		No data available; calculated ATE >20 - =50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
(R)-p-mentha-1,8-diene	Inhalation-Vapour (4 hours)	Mouse	LC50 > 3.14 mg/l
(R)-p-mentha-1,8-diene	Dermal	Rabbit	LD50 > 5,000 mg/kg
(R)-p-mentha-1,8-diene	Ingestion	Rat	LD50 4,400 mg/kg
propane	Inhalation-Gas (4 hours)	Rat	LC50 > 200,000 ppm
7-methyl-3-methyleneocta-1,6-diene	Dermal	Rabbit	LD50 > 5,000 mg/kg
7-methyl-3-methyleneocta-1,6-diene	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
(R)-p-mentha-1,8-diene	Rabbit	Irritant
propane	Rabbit	Minimal irritation
7-methyl-3-methyleneocta-1,6-diene	In vitro data	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
(R)-p-mentha-1,8-diene	Rabbit	Mild irritant
propane	Rabbit	Mild irritant
7-methyl-3-methyleneocta-1,6-diene	Rabbit	Severe irritant

Skin Sensitisation

Name	Species	Value
(R)-p-mentha-1,8-diene	Mouse	Sensitising
7-methyl-3-methyleneocta-1,6-diene	Mouse	Not classified

Respiratory Sensitisation

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

Germ Cell Mutagenicity

Name	Route	Value
(R)-p-mentha-1,8-diene	In Vitro	Not mutagenic
(R)-p-mentha-1,8-diene	In vivo	Not mutagenic
propane	In Vitro	Not mutagenic
7-methyl-3-methyleneocta-1,6-diene	In Vitro	Not mutagenic
7-methyl-3-methyleneocta-1,6-diene	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
(R)-p-mentha-1,8-diene	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
7-methyl-3-methyleneocta-1,6-diene	Ingestion	Multiple animal species	Carcinogenic.

Reproductive Toxicity**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	Exposure Duration
(R)-p-mentha-1,8-diene	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	prematuring & during gestation
(R)-p-mentha-1,8-diene	Ingestion	Not classified for development	Multiple animal species	NOAEL 591 mg/kg/day	during organogenesis
7-methyl-3-methyleneocta-1,6-diene	Ingestion	Not classified for male reproduction	Rat	NOAEL 500 mg/kg/day	90 days
7-methyl-3-methyleneocta-1,6-diene	Ingestion	Not classified for female reproduction	Rat	NOAEL 300 mg/kg/day	prematuring into lactation
7-methyl-3-methyleneocta-1,6-diene	Ingestion	Not classified for development	Rat	NOAEL 300 mg/kg/day	prematuring into lactation

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

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
(R)-p-mentha-1,8-diene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
(R)-p-mentha-1,8-diene	Ingestion	nervous system	Not classified		NOAEL Not available	
propane	Inhalation	cardiac sensitisation	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	
7-methyl-3-methyleneocta-1,6-diene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
(R)-p-mentha-1,8-diene	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 75 mg/kg/day	103 weeks
(R)-p-mentha-1,8-diene	Ingestion	liver	Not classified	Mouse	NOAEL 1,000	103 weeks

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(R)-p-mentha-1,8-diene	Ingestion	heart endocrine system bone, teeth, nails, and/or hair hematopoietic system immune system muscles nervous system respiratory system	Not classified	Rat	mg/kg/day NOAEL 600 mg/kg/day	103 weeks
7-methyl-3-methyleneocta-1,6-diene	Ingestion	immune system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 500 mg/kg/day	14 weeks
7-methyl-3-methyleneocta-1,6-diene	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 250 mg/kg/day	14 weeks
7-methyl-3-methyleneocta-1,6-diene	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	14 weeks
7-methyl-3-methyleneocta-1,6-diene	Ingestion	gastrointestinal tract liver respiratory system heart skin endocrine system bone, teeth, nails, and/or hair nervous system eyes	Not classified	Rat	NOAEL 2,000 mg/kg/day	14 weeks

Aspiration Hazard

Name	Value
(R)-p-mentha-1,8-diene	Aspiration hazard
7-methyl-3-methyleneocta-1,6-diene	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.

11.2. Information on other hazards

This material does not contain any substances that are assessed to be an endocrine disruptor for human health.

SECTION 12: Ecological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

12.1. Toxicity

No product test data available.

Material	CAS #	Organism	Type	Exposure	Test endpoint	Test result
(R)-p-mentha-1,8-diene	5989-27-5	Fathead minnow	Experimental	96 hours	LC50	0.702 mg/l
(R)-p-mentha-1,8-diene	5989-27-5	Green algae	Experimental	72 hours	ErC50	0.32 mg/l
(R)-p-mentha-1,8-diene	5989-27-5	Water flea	Experimental	48 hours	EC50	0.307 mg/l
(R)-p-mentha-1,8-diene	5989-27-5	Fathead minnow	Experimental	8 days	EC10	0.32 mg/l
(R)-p-mentha-1,8-diene	5989-27-5	Green algae	Experimental	72 hours	ErC10	0.174 mg/l
(R)-p-mentha-1,8-diene	5989-27-5	Water flea	Experimental	21 days	NOEC	0.153 mg/l

propane	74-98-6	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
7-methyl-3-methyleneocta-1,6-diene	123-35-3	Green algae	Experimental	72 hours	ErC50	0.342 mg/l
7-methyl-3-methyleneocta-1,6-diene	123-35-3	Medaka	Experimental	96 hours	LC50	0.92 mg/l
7-methyl-3-methyleneocta-1,6-diene	123-35-3	Water flea	Experimental	48 hours	EC50	0.45 mg/l
7-methyl-3-methyleneocta-1,6-diene	123-35-3	Green algae	Experimental	72 hours	NOEC	0.23 mg/l
7-methyl-3-methyleneocta-1,6-diene	123-35-3	Water flea	Experimental	21 days	NOEC	0.12 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
(R)-p-mentha-1,8-diene	5989-27-5	Experimental Biodegradation	14 days	BOD	98 %BOD/ThOD	OECD 301C - MITI test (I)
(R)-p-mentha-1,8-diene	5989-27-5	Experimental Biodegradation	14 days	Dissolv. Organic Carbon Deplet	>93.8 %removal of DOC	OECD 303A - Simulated Aerobic
propane	74-98-6	Experimental Photolysis		Photolytic half-life (in air)	27.5 days (t 1/2)	
7-methyl-3-methyleneocta-1,6-diene	123-35-3	Experimental Biodegradation	28 days	BOD	76 %BOD/ThOD	OECD 301D - Closed bottle test
7-methyl-3-methyleneocta-1,6-diene	123-35-3	Experimental Photolysis		Photolytic half-life (in air)	1.8 hours (t 1/2)	

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
(R)-p-mentha-1,8-diene	5989-27-5	Modeled Bioconcentration		Bioaccumulation factor	2100	Catalogic™
(R)-p-mentha-1,8-diene	5989-27-5	Experimental Bioconcentration		Log Kow	4.57	
propane	74-98-6	Experimental Bioconcentration		Log Kow	2.36	
7-methyl-3-methyleneocta-1,6-diene	123-35-3	Modeled Bioconcentration		Bioaccumulation factor	324	Catalogic™
7-methyl-3-methyleneocta-1,6-diene	123-35-3	Experimental Bioconcentration		Log Kow	4.82	EC A.8 Partition Coefficient

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
(R)-p-mentha-1,8-diene	5989-27-5	Modeled Mobility in Soil	Koc	9,245 l/kg	Episuite™
7-methyl-3-methyleneocta-1,6-diene	123-35-3	Modeled Mobility in Soil	Koc	1,100 l/kg	Episuite™

12.5. Results of the PBT and vPvB assessment

This material does not contain any substances that are assessed to be a PBT or vPvB

12.6. Endocrine disrupting properties

This material does not contain any substances that are assessed to be an endocrine disruptor for environmental effects

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1 Waste treatment 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.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

EU waste code (product as sold)

070704* Other organic solvents, washing liquids and mother liquors
16 05 04* Gases in pressure containers (including halons) containing dangerous substances

EU waste code (product container after use)

15 01 04 Metallic packaging

SECTION 14: Transportation information

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number or ID number	UN1950	UN1950	UN1950
14.2 UN proper shipping name	AEROSOLS	AEROSOLS, FLAMMABLE	AEROSOLS
14.3 Transport hazard class(es)	2.1	2.1	2.1
14.4 Packing group	Not applicable.	Not applicable.	Not applicable.
14.5 Environmental hazards	Not Environmentally Hazardous	Not applicable	Not a Marine Pollutant
14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.

14.7 Marine Transport in bulk according to IMO instruments	No data available.	No data available.	No data available.
Control Temperature	No data available.	No data available.	No data available.
Emergency Temperature	No data available.	No data available.	No data available.
ADR Classification Code	5F	Not applicable.	Not applicable.
IMDG Segregation Code	Not applicable.	Not applicable.	NONE

Please contact the address or phone number listed on the first page of the SDS for additional information on the transport/shipment of the material by rail (RID) or inland waterways (ADN).

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Carcinogenicity

<u>Ingredient</u>	<u>CAS Nbr</u>	<u>Classification</u>	<u>Regulation</u>
(R)-p-mentha-1,8-diene	5989-27-5	Gr. 3: Not classifiable	International Agency for Research on Cancer
7-methyl-3-methylenoocta-1,6-diene	123-35-3	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

Global inventory status

Contact 3M for more information.

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Seveso hazard categories, Annex 1, Part 1

Hazard Categories	Qualifying quantity (tonnes) for the application of	
	Lower-tier requirements	Upper-tier requirements
E1 Hazardous to the Aquatic environment	100	200
P3a FLAMMABLE AEROSOLS	150 (net)	500 (net)

Seveso named dangerous substances, Annex 1, Part 2

None

Regulation (EU) No 649/2012

No chemicals listed

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this mixture. Chemical safety assessments for the contained substances may have been carried out by the registrants of the substances in accordance with Regulation (EC) No

1907/2006, as amended.

SECTION 16: Other information**List of relevant H statements**

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H226	Flammable liquid and vapour.
H229	Pressurised container: may burst if heated.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Revision information:

Section 8: glove data value information was added.

Section 8: glove data value information was modified.

Section 8: Respiratory protection - recommended respirators information information was modified.

Section 9: Flammability (solid, gas) information information was deleted.

Section 09: Flammability information information was added.

Section 15: Seveso Substance Text information was deleted.

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