



Safety Data Sheet

© 2015, 3M Company All rights reserved. Copying and/or downloading of this information for the purpose of properly utilising 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

Document group:	16-6445-7	Version number:	2.00
Issue Date:	30/07/2015	Supersedes date:	25/01/2011

This Safety Data Sheet has been prepared in accordance with the New Zealand, Hazardous Substances and New Organisms Act 1996 (HSNO Act) and Regulations, as amended.

SECTION 1: Identification

1.1. Product identifier

3M™ General Trim Adhesive, PN 08088

Product Identification Numbers

60-4550-5618-8

1.2. Recommended use and restrictions on use

Recommended use

Automotive., Automotive trim adhesive., High strength adhesive for bonding automotive materials (carpeting, fabrics, plastics) to metal and other surfaces.

Restrictions on use

Not recommended for bonding polystyrene foam.

1.3. Supplier's details

Address: 3M New Zealand Ltd, 94 Apollo Drive, Rosedale 0632, Auckland
Telephone: (09) 477 4040
E Mail: innovation@nz.mmm.com
Website: 3m.co.nz

1.4. Emergency telephone number

24 hr Medical Emergency, National Poisons Centre, 0800 764 766 (0800 POISON)

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classified as hazardous according to the New Zealand, Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 as amended.

Classified as a Dangerous Good according to; New Zealand, Land Transport Rule: Dangerous Goods 2005 (Rule 45001/1) as amended, NZS 5433:2012 Transport of Dangerous Goods on Land, UN Model Regulations on the Transport of Dangerous Goods, International Maritime Dangerous Goods Code and IATA Dangerous Goods Regulations. For transport classification, refer to SECTION 14: Transport Information.

HSNO classification

2.1.2A Flammable aerosol

- 6.1E Acute toxicity
- 6.3B Irritating to the skin
- 6.4A Irritating to the eye
- 6.9A Toxic to human target organs/systems
- 9.1D Aquatic toxicity

2.2. Label elements

SIGNAL WORD

DANGER!

Symbols:

Flame | Health Hazard | Exclamation mark |

Pictograms



HAZARD STATEMENTS:

H223	Flammable aerosol.
H333	May be harmful if inhaled.
H335	May cause respiratory irritation.
H320	Causes eye irritation.
H316	Causes mild skin irritation.
H370	Causes damage to organs: cardiovascular system
H401	Toxic to aquatic life.

PRECAUTIONARY STATEMENTS

Prevention:

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.

Response:

P304 + P312	IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P307 + P311	IF exposed: Call a POISON CENTER or doctor/physician.

Storage:

P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50oC.
P405	Store locked up.

Disposal:

P501	Dispose of contents/container in accordance with applicable local/regional/national/international regulations.
------	--

2.3. Other hazards

May cause drowsiness or dizziness.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	% by Weight
Dimethyl Ether	115-10-6	30 - 60
Methyl Acetate	79-20-9	15 - 40
Non-volatile Components	Trade Secret	10 - 20
Cyclohexane	110-82-7	7 - 13
1,1-Difluoroethane	75-37-6	1 - 5
Hydrotreated Light Petroleum Distillates	64742-47-8	0.5 - 1.5
Petroleum Distillate	64742-48-9	0.5 - 1.5

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Remove person to fresh air. Get medical attention.

Skin contact

Wash with soap and water. 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.

A product risk assessment is recommended to determine if eye wash facilities may be required when using this product in the workplace.

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

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

Aldehydes.
Formaldehyde
Carbon monoxide.
Carbon dioxide.

Condition

During combustion.
During combustion.
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.

5.4. Hazchem code: 2YE

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. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build 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. 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 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.

SECTION 7: Handling and storage

Refer to Section 15: HSNO Controls for more information.

7.1. Precautions for safe handling

Do not use in a confined area with minimal air exchange. Keep out of reach of children. 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. Avoid release to the environment. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

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 oxidising agents.

7.3. Approved handler test certificate

Class 2, required when present in quantities greater than 3,000 L (aggregate water capacity)

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	CAS Nbr	Agency	Limit type	Additional comments
Cyclohexane	110-82-7	ACGIH	TWA:100 ppm	
Cyclohexane	110-82-7	New Zealand WES	TWA(8 hours):350 mg/m3(100 ppm);STEL(15 minutes):1050 mg/m3(300 ppm)	
Dimethyl Ether	115-10-6	AIHA	TWA:1880 mg/m3(1000 ppm)	
Dimethyl Ether	115-10-6	CMRG	TWA:1000 ppm	
Dimethyl Ether	115-10-6	New Zealand WES	TWA(8 hours): 766 mg/m3 (400 ppm); STEL(15 minutes): 958 mg/m3 (500 ppm)	
Hydrotreated Light Petroleum Distillates	64742-47-8	CMRG	TWA:165 ppm	
Kerosine (petroleum)	64742-47-8	ACGIH	TWA(as total hydrocarbon vapor, non-aerosol):200 mg/m3	A3: Confirmed animal carcin., Skin Notation
Naphtha	64742-48-9	New Zealand WES	TWA(8 hours):1600 mg/m3(400 ppm)	
Petroleum Distillate	64742-48-9	Manufacturer determined	TWA:100 ppm	
1,1-Difluoroethane	75-37-6	AIHA	TWA:2700 mg/m3(1000 ppm)	
1,1-Difluoroethane	75-37-6	CMRG	TWA:1000 ppm	
Methyl Acetate	79-20-9	ACGIH	TWA:200 ppm;STEL:250 ppm	
Methyl Acetate	79-20-9	New Zealand WES	TWA(8 hours):606 mg/m3(200 ppm);STEL(15 minutes):757 mg/m3(250 ppm)	

ACGIH : American Conference of Governmental Industrial Hygienists
 AIHA : American Industrial Hygiene Association
 CMRG : Chemical Manufacturer's Recommended Guidelines
 New Zealand WES : New Zealand Workplace Exposure Standards.
 TWA: Time-Weighted-Average
 STEL: Short Term Exposure Limit
 ppm: parts per million
 mg/m³: milligrams per cubic metre
 CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Do not remain in area where available oxygen may be reduced. 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.

Refer AS/NZS 1336 - Recommended practices for occupational eye protection and for performance specifications AS/NZS 1337, Parts 1 - 6 - Personal eye-protection.

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions.

Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended: Nitrile rubber.

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.

Refer AS/NZS 1715 - Selection, use and maintenance of respiratory protective equipment and AS/NZS 1716 - Respiratory protective devices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Aerosol
Appearance/Odour	Liquid in aerosol, clear, sweet fruity odour.
Odour threshold	No data available.
pH	Not applicable.
Melting point/Freezing point	No data available.
Boiling point/Initial boiling point/Boiling range	No data available.
Flash point	-40 °C [Test Method:Tagliabue closed cup]
Evaporation rate	1.9 [Ref Std:ETHER=1]
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	No data available.
Flammable Limits(UEL)	No data available.
Vapour pressure	No data available.
Vapour density	2.97 [Ref Std:AIR=1]
Density	0.781 g/ml [Details:Refers to density of the liquid.]
Relative density	0.781 [Ref Std:WATER=1]
Water solubility	Nil
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Autoignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.
Volatile organic compounds (VOC)	53.6 % weight [Test Method:calculated per CARB title 2]
Volatile organic compounds (VOC)	429 g/l [Test Method:calculated SCAQMD rule 443.1]
Percent volatile	86.5 % weight
VOC less H2O & exempt solvents	430 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 polymerisation will not occur.

10.4 Conditions to avoid

Heat.

Sparks and/or flames.

10.5 Incompatible materials

Strong oxidising agents.

Alkali and alkaline earth metals.

10.6 Hazardous decomposition products

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

Refer to Section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, 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. Simple asphyxiation: Signs/symptoms may include increased heart rate, rapid respirations, drowsiness, headache, incoordination, altered judgement, nausea, vomiting, lethargy, seizures, coma, and may be fatal. 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

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

Eye contact

Moderate eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. 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. Cardiac sensitisation: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE20 - 50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Dimethyl Ether	Inhalation-Gas (4 hours)	Rat	LC50 164,000 ppm
Methyl Acetate	Dermal	Rat	LD50 > 2,000 mg/kg
Methyl Acetate	Inhalation-Vapor (4 hours)	Rat	LC50 > 49 mg/l
Methyl Acetate	Ingestion	Rat	LD50 > 5,000 mg/kg
Cyclohexane	Dermal	Rat	LD50 > 2,000 mg/kg
Cyclohexane	Inhalation-Vapor (4 hours)	Rat	LC50 > 32.9 mg/l
Cyclohexane	Ingestion	Rat	LD50 6,200 mg/kg
Non-volatile Components	Ingestion	Rat	LD50 > 34,000 mg/kg
1,1-Difluoroethane	Inhalation-Gas (4 hours)	Rat	LC50 > 437,000 ppm
1,1-Difluoroethane	Ingestion	Rat	LD50 > 1,500 mg/kg
Petroleum Distillate	Inhalation-Vapor		LC50 estimated to be 20 - 50 mg/l
Hydrotreated Light Petroleum Distillates	Dermal	Rabbit	LD50 > 3,160 mg/kg
Petroleum Distillate	Dermal	Rabbit	LD50 > 3,000 mg/kg
Hydrotreated Light Petroleum Distillates	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 3 mg/l
Hydrotreated Light Petroleum Distillates	Ingestion	Rat	LD50 > 5,000 mg/kg
Petroleum Distillate	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Methyl Acetate	Rabbit	No significant irritation
Cyclohexane	Rabbit	Mild irritant
Hydrotreated Light Petroleum Distillates	Rabbit	Mild irritant
Petroleum Distillate	Rabbit	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
Methyl Acetate	Rabbit	Moderate irritant
Cyclohexane	Rabbit	Mild irritant
Hydrotreated Light Petroleum Distillates	Rabbit	Mild irritant
Petroleum Distillate	Rabbit	No significant irritation

Skin Sensitisation

Name	Species	Value
Methyl Acetate	Human	Not sensitizing
Hydrotreated Light Petroleum Distillates	Guinea pig	Not sensitizing
Petroleum Distillate	Guinea pig	Not sensitizing

Respiratory Sensitisation

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

Germ Cell Mutagenicity

Name	Route	Value
Dimethyl Ether	In Vitro	Not mutagenic
Dimethyl Ether	In vivo	Not mutagenic
Methyl Acetate	In Vitro	Not mutagenic
Methyl Acetate	In vivo	Not mutagenic
Cyclohexane	In Vitro	Not mutagenic
Cyclohexane	In vivo	Some positive data exist, but the data are not sufficient for classification
1,1-Difluoroethane	In Vitro	Some positive data exist, but the data are not sufficient for classification
1,1-Difluoroethane	In vivo	Some positive data exist, but the data are not sufficient for classification
Hydrotreated Light Petroleum Distillates	In Vitro	Not mutagenic
Petroleum Distillate	In vivo	Not mutagenic
Petroleum Distillate	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Dimethyl Ether	Inhalation	Rat	Not carcinogenic
1,1-Difluoroethane	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Hydrotreated Light Petroleum Distillates	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Petroleum Distillate	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Petroleum Distillate	Inhalation	Human and animal	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Dimethyl Ether	Inhalation	Not toxic to development	Rat	NOAEL 40,000 ppm	during organogenesis
Cyclohexane	Inhalation	Not toxic to female reproduction	Rat	NOAEL 24 mg/l	2 generation
Cyclohexane	Inhalation	Not toxic to male reproduction	Rat	NOAEL 24 mg/l	2 generation
Cyclohexane	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 6.9 mg/l	2 generation
1,1-Difluoroethane	Inhalation	Not toxic to development	Rat	NOAEL 50,000 ppm	during organogenesis
Petroleum Distillate	Inhalation	Not toxic to development	Rat	NOAEL 2.4 mg/l	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Dimethyl Ether	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Rat	LOAEL 10,000 ppm	30 minutes
Dimethyl Ether	Inhalation	cardiac sensitization	Some positive data exist, but the	Dog	NOAEL	5 minutes

			data are not sufficient for classification		100,000 ppm	
Methyl Acetate	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Methyl Acetate	Inhalation	respiratory irritation	May cause respiratory irritation	Human and animal	NOAEL Not available	
Methyl Acetate	Inhalation	blindness	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Methyl Acetate	Ingestion	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
Cyclohexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Cyclohexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	
1,1-Difluoroethane	Inhalation	cardiac sensitization	Causes damage to organs	Human and animal	NOAEL Not available	poisoning and/or abuse
1,1-Difluoroethane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL 100,000 ppm	
1,1-Difluoroethane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Not available	NOAEL Not available	not available
Hydrotreated Light Petroleum Distillates	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Hydrotreated Light Petroleum Distillates	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Petroleum Distillate	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Petroleum Distillate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Petroleum Distillate	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 6.5 mg/l	4 hours
Petroleum Distillate	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Dimethyl Ether	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 25,000 ppm	2 years
Dimethyl Ether	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 20,000 ppm	30 weeks
Methyl Acetate	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.1 mg/l	28 days
Methyl Acetate	Inhalation	endocrine system hematopoietic system liver immune system kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 6.1 mg/l	28 days
Cyclohexane	Inhalation	liver	Some positive data exist, but the data are not sufficient for	Rat	NOAEL 24 mg/l	90 days

			classification			
Cyclohexane	Inhalation	auditory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.7 mg/l	90 days
Cyclohexane	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rabbit	NOAEL 2.7 mg/l	10 weeks
Cyclohexane	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 24 mg/l	14 weeks
Cyclohexane	Inhalation	peripheral nervous system	All data are negative	Rat	NOAEL 8.6 mg/l	30 weeks
1,1-Difluoroethane	Inhalation	hematopoietic system kidney and/or bladder respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 25,000 ppm	2 years
Petroleum Distillate	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 4.6 mg/l	6 months
Petroleum Distillate	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 1.9 mg/l	13 weeks
Petroleum Distillate	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 0.6 mg/l	90 days
Petroleum Distillate	Inhalation	bone, teeth, nails, and/or hair blood liver muscles	All data are negative	Rat	NOAEL 5.6 mg/l	12 weeks
Petroleum Distillate	Inhalation	heart	All data are negative	Multiple animal species	NOAEL 1.3 mg/l	90 days

Aspiration Hazard

Name	Value
Cyclohexane	Aspiration hazard
Hydrotreated Light Petroleum Distillates	Aspiration hazard
Petroleum Distillate	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

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

Ecotoxic to the aquatic environment.

9.1D Aquatic toxicity

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
1,1-Difluoroethane	75-37-6	Water flea	Estimated	48 hours	EC50	980 mg/l
1,1-Difluoroethane	75-37-6	Rainbow trout	Estimated	96 hours	LC50	450 mg/l
Cyclohexane	110-82-7	Fathead	Experimental	96 hours	LC50	4.53 mg/l

		minnow				
Cyclohexane	110-82-7	Green Algae	Experimental	72 hours	EC50	3.4 mg/l
Cyclohexane	110-82-7	Water flea	Experimental	48 hours	EC50	0.9 mg/l
Dimethyl Ether	115-10-6	Guppy	Experimental	96 hours	LC50	>4,000 mg/l
Dimethyl Ether	115-10-6	Water flea	Experimental	48 hours	EC50	>4,000 mg/l
Methyl Acetate	79-20-9	Fathead minnow	Experimental	96 hours	LC50	320 mg/l
Methyl Acetate	79-20-9	Water flea	Experimental	48 hours	EC50	1,026.7 mg/l
Non-volatile Components	Trade Secret		Data not available or insufficient for classification			
Hydrotreated Light Petroleum Distillates	64742-47-8		Data not available or insufficient for classification			
Petroleum Distillate	64742-48-9		Data not available or insufficient for classification			

12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Methyl Acetate	79-20-9	Experimental Photolysis		Photolytic half-life (in air)	1.8 hours (t 1/2)	Other methods
Cyclohexane	110-82-7	Experimental Photolysis		Photolytic half-life (in air)	4.14 days (t 1/2)	Other methods
Dimethyl Ether	115-10-6	Experimental Photolysis		Photolytic half-life (in air)	10.77 days (t 1/2)	Other methods
Petroleum Distillate	64742-48-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hydrotreated Light Petroleum Distillates	64742-47-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
1,1-Difluoroethane	75-37-6	Estimated Biodegradation	28 days	BOD	4 % weight	OECD 301D - Closed bottle test
Methyl Acetate	79-20-9	Experimental Biodegradation	14 days	BOD	74 % weight	OECD 301D - Closed bottle test
Cyclohexane	110-82-7	Experimental Biodegradation	28 days	BOD	77 % weight	OECD 301F - Manometric respirometry
Non-volatile Components	Trade Secret	Experimental Biodegradation	28 days	BOD	0 % weight	OECD 301C - MITI test (I)

12.3 : Bioaccumulative potential

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Hydrotreated Light Petroleum	64742-47-8	Data not available or insufficient for	N/A	N/A	N/A	N/A

Distillates		classification				
Non-volatile Components	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Petroleum Distillate	64742-48-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Cyclohexane	110-82-7	Experimental BCF-Carp	56 days	Bioaccumulation factor	<129	Other methods
1,1-Difluoroethane	75-37-6	Experimental Bioconcentration		Log Kow	0.75	Other methods
Dimethyl Ether	115-10-6	Experimental Bioconcentration		Log Kow	0.2	Other methods
Methyl Acetate	79-20-9	Experimental Bioconcentration		Log Kow	0.18	Other methods

12.4. Mobility in soil

Please contact manufacturer for more details

12.5 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Disposal methods

See Section 11.1 Information on toxicological effects

Incinerate uncured product 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.

Disposal of the aerosol dispenser (that may or may not contain any residual substance), may be lawfully disposed of by householders or other consumers through public or commercial waste collection services.

SECTION 14: Transport Information

60-4550-5618-8

NEW ZEALAND LAND TRANSPORT:
UN1950, AEROSOLS, 2.1, LIMITED QUANTITY

IATA: International Air Transport Association
UN1950, AEROSOLS, FLAMMABLE, 2.1

IMO: International Maritime Organization
UN1950, AEROSOLS, 2.1, LIMITED QUANTITY

SECTION 15: Regulatory information

HSNO Approval number HSR002515
Group standard name Aerosols (Flammable) Group Standard 2006
HSNO Hazard classification Refer to Section 2: Hazard identification

NZ Inventory of Chemicals (NZIoC) Status

All applicable chemical ingredients in this material are in compliance with NZIoC listing requirements.

HSNO Controls

Approved handler test certificate	Class 2, required when present in quantities greater than 3,000 L (aggregate water capacity)
Location and transit Depot certification test	3,000 L (aggregate water capacity)
Hazardous atmosphere zone	3,000 L (aggregate water capacity)
Fire extinguishers	One required for 3,000 L (aggregate water capacity)
Emergency response plan	3,000 L (aggregate water capacity)
Secondary containment	Not required
Tracking	Not required
Warning signage	3,000 L (aggregate water capacity)

SECTION 16: Other information

Revision information:

No revision information

The information in this Safety Data Sheet (SDS) is believed to be correct as of the date of issue. TO THE EXTENT PERMITTED BY LAW, 3M MAKES NO WARRANTY, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY, OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluates the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application. 3M provides information in electronic form as a service to customers. Due to the remote possibility of electronic transfer may have resulted in errors, omissions or alterations in this information; 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from 3M.

3M New Zealand SDS are available at 3M New Zealand Website: <http://solutions.3mnz.co.nz>