



## Safety Data Sheet

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

#### 1.1. Product identifier

3M™ Novec™ Electronic Degreaser

#### Product Identification Numbers

98-0212-4890-5

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

##### Identified uses

Electronic Degreaser

##### Uses advised against

For Industrial Use only. Not intended for consumer sale or use. Not intended for use as a medical device or drug.

#### 1.3. Details of the supplier of the safety data sheet

**ADDRESS:** 3M Israel, 91 Medinat Ha'Yehudim Street, Herzeliya 46120  
**Telephone:** 09-961 5000  
**E Mail:** innovation.il@mmm.com  
**Website:** www.3M.com/il

#### 1.4. Emergency telephone number

09-961 5000

### SECTION 2: Hazard identification

#### 2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

##### CLASSIFICATION:

Aerosol, Category 3 - Aerosol 3; H229  
Acute Toxicity, Category 4 - Acute Tox. 4; H332  
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319  
Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336  
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

Warning

#### Symbols:

GHS07 (Exclamation mark) |

#### Pictograms



#### Ingredients:

Ingredient	C.A.S. No.	EC No.	% by Wt
1,2-TRANS-DICHLOROETHYLENE	156-60-5	205-860-2	65 - 75

#### HAZARD STATEMENTS:

H229	Pressurized container: may burst if heated.
H332	Harmful if inhaled.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

#### PRECAUTIONARY STATEMENTS

##### Prevention:

P210A	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251	Do not pierce or burn, even after use.
P261E	Avoid breathing vapor or spray.

##### Response:

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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##### Storage:

P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50C/122F.
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##### Disposal:

P501	Dispose of contents/container in accordance with applicable local/regional/national/international regulations.
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#### Notes on labelling:

Updated per Regulation (EC) No. 648/2004 on detergents.  
Non-flammable per division testing.

## 2.3. Other hazards

None known

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

Ingredient	C.A.S. No.	EC No.	% by Wt	Classification
1,2-TRANS-DICHLOROETHYLENE	156-60-5	205-860-2	65 - 75	**Flam. Liq. 2**, H225; **Acute Tox. 4**, H332; **Aquatic Chronic 3**, H412 - Nota C **Eye Irrit. 2**, H319; **STOT SE 3**, H336
METHYL NONAFLUOROISOBUTYL ETHER	163702-08-7	ELINCS 422- 270-2	10 - 20	Substance not classified as hazardous
METHYL NONAFLUOROBUTYL ETHER	163702-07-6	ELINCS 422- 270-2	5 - 15	Substance not classified as hazardous
Carbon dioxide	124-38-9	204-696-9	< 5	**Liquefied gas**, H280

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. If you feel unwell, get medical attention.

**Skin Contact:**

Wash with soap and water. If you feel unwell, get medical attention.

**Eye Contact:**

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

**If Swallowed:**

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

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

See Section 11.1. Information on toxicological effects.

**4.3. Indication of any immediate medical attention and special treatment required**

Not applicable.

**SECTION 5: Fire-fighting measures****5.1. 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. Exposure to extreme heat can give rise to thermal decomposition.

**5.3. Advice for fire-fighters**

When fire fighting conditions are severe and total thermal decomposition of the product is possible, 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. Ventilate the area with fresh air. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

### 6.2. Environmental precautions

Avoid release to the environment.

### 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. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

### 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

Do not breathe thermal decomposition products. Store work clothes separately from other clothing, food and tobacco products. Do not pierce or burn, even after use. Avoid breathing 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.) No smoking: Smoking while using this product can result in contamination of the tobacco and/or smoke and lead to the formation of hazardous decomposition products.

### 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 strong bases. Store away from oxidizing 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

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
Carbon dioxide	124-38-9	ACGIH	TWA:5000 ppm;STEL:30000 ppm	

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1,2-TRANS-DICHLOROETHYLENE	156-60-5	ACGIH	TWA:200 ppm	
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ACGIH : American Conference of Governmental Industrial Hygienists

CMRG : Chemical Manufacturer's Recommended Guidelines

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

No chemical protective gloves are required.

##### Respiratory protection

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

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors

Organic vapor respirators may have short service life.

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 state

Liquid

Color

Colorless

Specific Physical Form:

Aerosol

Odor

Slight Odor

Odor threshold

*No Data Available*

pH

*Not Applicable*

Boiling point/boiling range

43 °C

Melting point

*Not Applicable*

Flammability (solid, gas)

Not Applicable

Explosive properties:

Not Classified

Oxidising properties:

Not Classified

Flash Point

No flash point

Autoignition temperature

396 °C

Flammable Limits(LEL)

6.7 % volume

<b>Flammable Limits(UEL)</b>	13.7 % volume
<b>Vapor Pressure</b>	43,996.3 Pa
<b>Relative Density</b>	1.28 [Ref Std: WATER=1]
<b>Water solubility</b>	Negligible
<b>Solubility- non-water</b>	No Data Available
<b>Partition coefficient: n-octanol/ water</b>	No Data Available
<b>Evaporation rate</b>	No Data Available
<b>Vapor Density</b>	No Data Available
<b>Decomposition temperature</b>	No Data Available
<b>Viscosity</b>	0.45 mPa-s
<b>Density</b>	1.28 g/ml

**9.2. Other information**

<b>EU Volatile Organic Compounds</b>	No Data Available
<b>Molecular weight</b>	No Data Available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

**10.2. Chemical stability**

Stable.

**10.3. Possibility of hazardous reactions**

Hazardous polymerization will not occur.

**10.4. Conditions to avoid**

Heat

**10.5. Incompatible materials**

Strong oxidizing agents

Strong bases

**10.6. Hazardous decomposition products**

<u>Substance</u>	<u>Condition</u>
Hydrogen Chloride	At Elevated Temperatures - - extreme conditions of heat
Hydrogen Fluoride	At Elevated Temperatures - - extreme conditions of heat
Perfluoroisobutylene (PFIB)	At Elevated Temperatures - - extreme conditions of heat

If the product is exposed to extreme condition of heat from misuse or equipment failure, toxic decomposition products that include hydrogen fluoride and perfluoroisobutylene can occur.

**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 3M assessments.

## 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:

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

#### Eye Contact:

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

#### Ingestion:

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

May cause additional health effects (see below).

### Additional Health Effects:

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

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

### 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-Vapor(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
1,2-TRANS-DICHLOROETHYLENE	Dermal	Rabbit	LD50 > 5,000 mg/kg
1,2-TRANS-DICHLOROETHYLENE	Inhalation-Vapor (4 hours)	Rat	LC50 95.6 mg/l
1,2-TRANS-DICHLOROETHYLENE	Ingestion	Rat	LD50 7,902 mg/kg
METHYL NONAFLUOROISOBUTYL ETHER	Dermal		LD50 estimated to be > 5,000 mg/kg
METHYL NONAFLUOROISOBUTYL ETHER	Inhalation-Vapor (4 hours)	Rat	LC50 > 1,000 mg/l
METHYL NONAFLUOROISOBUTYL ETHER	Ingestion	Rat	LD50 > 5,000 mg/kg
METHYL NONAFLUOROBUTYL ETHER	Dermal		LD50 estimated to be > 5,000 mg/kg
METHYL NONAFLUOROBUTYL ETHER	Inhalation-Vapor (4 hours)	Rat	LC50 > 1,000 mg/l
METHYL NONAFLUOROBUTYL ETHER	Ingestion	Rat	LD50 > 5,000 mg/kg
Carbon dioxide	Inhalation-Gas (4 hours)	Rat	LC50 > 53,000 ppm

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

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Name	Species	Value
1,2-TRANS-DICHLOROETHYLENE	Rabbit	Minimal irritation
METHYL NONAFLUOROISOBUTYL ETHER	Rabbit	No significant irritation
METHYL NONAFLUOROBUTYL ETHER	Rabbit	No significant irritation

**Serious Eye Damage/Irritation**

Name	Species	Value
1,2-TRANS-DICHLOROETHYLENE	Rabbit	Moderate irritant
METHYL NONAFLUOROISOBUTYL ETHER	Rabbit	No significant irritation
METHYL NONAFLUOROBUTYL ETHER	Rabbit	No significant irritation

**Skin Sensitization**

Name	Species	Value
METHYL NONAFLUOROISOBUTYL ETHER	Guinea pig	Not classified
METHYL NONAFLUOROBUTYL ETHER	Guinea pig	Not classified

**Respiratory Sensitization**

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

**Germ Cell Mutagenicity**

Name	Route	Value
1,2-TRANS-DICHLOROETHYLENE	In Vitro	Not mutagenic
1,2-TRANS-DICHLOROETHYLENE	In vivo	Not mutagenic
METHYL NONAFLUOROISOBUTYL ETHER	In Vitro	Not mutagenic
METHYL NONAFLUOROISOBUTYL ETHER	In vivo	Not mutagenic
METHYL NONAFLUOROBUTYL ETHER	In Vitro	Not mutagenic
METHYL NONAFLUOROBUTYL ETHER	In vivo	Not mutagenic

**Carcinogenicity**

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

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

Name	Route	Value	Species	Test Result	Exposure Duration
1,2-TRANS-DICHLOROETHYLENE	Inhalation	Not classified for development	Rat	NOAEL 24 mg/l	during organogenesis
METHYL NONAFLUOROISOBUTYL ETHER	Inhalation	Not classified for female reproduction	Rat	NOAEL 129 mg/l	1 generation
METHYL NONAFLUOROISOBUTYL ETHER	Inhalation	Not classified for male reproduction	Rat	NOAEL 129 mg/l	1 generation
METHYL NONAFLUOROISOBUTYL ETHER	Inhalation	Not classified for development	Rat	NOAEL 307 mg/l	during gestation
METHYL NONAFLUOROBUTYL ETHER	Inhalation	Not classified for female reproduction	Rat	NOAEL 129 mg/l	1 generation
METHYL NONAFLUOROBUTYL ETHER	Inhalation	Not classified for male reproduction	Rat	NOAEL 129 mg/l	1 generation
METHYL NONAFLUOROBUTYL ETHER	Inhalation	Not classified for development	Rat	NOAEL 307 mg/l	during gestation
Carbon dioxide	Inhalation	Not classified for male reproduction	Mouse	LOAEL 350,000 ppm	not available
Carbon dioxide	Inhalation	Not classified for development	Rat	LOAEL 60,000 ppm	24 hours

**Target Organ(s)**



**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
1,2-TRANS-DICHLOROETHYLENE	Inhalation	central nervous system depression	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
1,2-TRANS-DICHLOROETHYLENE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
1,2-TRANS-DICHLOROETHYLENE	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Rat	LOAEL 4,500 mg/kg	not applicable
METHYL NONAFLUOROISOBUTYL ETHER	Inhalation	nervous system	Not classified	Dog	LOAEL 913 mg/l	10 minutes
METHYL NONAFLUOROISOBUTYL ETHER	Inhalation	cardiac sensitization	Not classified	Dog	NOAEL 913 mg/l	10 minutes
METHYL NONAFLUROBUTYL ETHER	Inhalation	nervous system	Not classified	Dog	LOAEL 913 mg/l	10 minutes
METHYL NONAFLUROBUTYL ETHER	Inhalation	cardiac sensitization	Not classified	Dog	NOAEL 913 mg/l	10 minutes

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
1,2-TRANS-DICHLOROETHYLENE	Inhalation	endocrine system   liver   kidney and/or bladder   respiratory system	Not classified	Rat	NOAEL 16 mg/l	90 days
1,2-TRANS-DICHLOROETHYLENE	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 2,000 mg/kg/day	14 weeks
1,2-TRANS-DICHLOROETHYLENE	Ingestion	blood   liver	Not classified	Rat	NOAEL 125 mg/kg/day	14 weeks
1,2-TRANS-DICHLOROETHYLENE	Ingestion	heart   immune system   respiratory system	Not classified	Rat	NOAEL 2,000 mg/kg/day	14 weeks
METHYL NONAFLUROISOBUTYL ETHER	Inhalation	liver	Not classified	Rat	NOAEL 155 mg/l	13 weeks
METHYL NONAFLUROISOBUTYL ETHER	Inhalation	bone, teeth, nails, and/or hair	Not classified	Rat	NOAEL 129 mg/l	11 weeks
METHYL NONAFLUROISOBUTYL ETHER	Inhalation	heart   skin   endocrine system   gastrointestinal tract   hematopoietic system   immune system   muscles   nervous system   eyes   kidney and/or bladder   respiratory system	Not classified	Rat	NOAEL 155 mg/l	13 weeks
METHYL NONAFLUROISOBUTYL ETHER	Ingestion	endocrine system   liver   heart   hematopoietic system   immune system   nervous system   eyes   kidney and/or bladder   respiratory system	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
METHYL NONAFLUROBUTYL	Inhalation	liver	Not classified	Rat	NOAEL 155 mg/l	13 weeks

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METHYL NONAFLUOROBUTYL ETHER	Inhalation	bone, teeth, nails, and/or hair	Not classified	Rat	NOAEL 129 mg/l	11 weeks
METHYL NONAFLUOROBUTYL ETHER	Inhalation	heart   skin   endocrine system   gastrointestinal tract   hematopoietic system   immune system   muscles   nervous system   eyes   kidney and/or bladder   respiratory system	Not classified	Rat	NOAEL 155 mg/l	13 weeks
METHYL NONAFLUOROBUTYL ETHER	Ingestion	endocrine system   liver   heart   hematopoietic system   immune system   nervous system   eyes   kidney and/or bladder   respiratory system	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
Carbon dioxide	Inhalation	heart   bone, teeth, nails, and/or hair   liver   nervous system   kidney and/or bladder   respiratory system	Not classified	Rat	LOAEL 60,000 ppm	166 days

### Aspiration Hazard

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

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 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
1,2-TRANS- DICHLOROETHYLE NE	156-60-5	Water flea	Experimental	48 hours	Lethal Concentration 50%	220 mg/l
1,2-TRANS- DICHLOROETHYLE NE	156-60-5	Bluegill	Estimated	96 hours	Lethal Concentration 50%	140 mg/l
1,2-TRANS- DICHLOROETHYLE NE	156-60-5	Green Algae	Experimental	48 hours	Effect Concentration 50%	36.36 mg/l
METHYL NONAFLUROISOB UTYL ETHER	163702-08-7	Water flea	Estimated	48 hours	Effect Concentration 50%	>100 mg/l
METHYL NONAFLUROISOB UTYL ETHER	163702-08-7	Green Algae	Estimated	72 hours	Effect Concentration 50%	>100 mg/l

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METHYL NONAFLUOROISOB UTYL ETHER	163702-08-7	Fathead Minnow	Endpoint not reached	96 hours	Lethal Concentration 50%	>100 mg/l
METHYL NONAFLUOROISOB UTYL ETHER	163702-08-7	Green Algae	Estimated	72 hours	No obs Effect Conc	100 mg/l
METHYL NONAFLUOROBUTY L ETHER	163702-07-6	Green Algae	Estimated	72 hours	Effect Concentration 50%	>100 mg/l
METHYL NONAFLUOROBUTY L ETHER	163702-07-6	Fathead Minnow	Endpoint not reached	96 hours	Lethal Concentration 50%	>100 mg/l
METHYL NONAFLUOROBUTY L ETHER	163702-07-6	Water flea	Estimated	48 hours	Effect Concentration 50%	>100 mg/l
METHYL NONAFLUOROBUTY L ETHER	163702-07-6	Green Algae	Estimated	72 hours	No obs Effect Conc	100 mg/l
Carbon dioxide	124-38-9	Fish	Experimental	96 hours	Lethal Concentration 50%	112.2 mg/l
Carbon dioxide	124-38-9	Atlantic Salmon	Experimental	43 days	No obs Effect Conc	26 mg/l

**12.2. Persistence and degradability**

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
1,2-TRANS- DICHLOROETHYLENE	156-60-5	Experimental Photolysis		Photolytic half-life (in air)	13 days (t 1/2)	Other methods
1,2-TRANS- DICHLOROETHYLENE	156-60-5	Experimental Biodegradation	28 days	Biological Oxygen Demand	8 % weight	OECD 301D - Closed Bottle Test
METHYL NONAFLUOROISOBUTY L ETHER	163702-08-7	Estimated Biodegradation	28 days	Biological Oxygen Demand	22 % BOD/ThBOD	OECD 301D - Closed Bottle Test
METHYL NONAFLUOROBUTYL ETHER	163702-07-6	Estimated Biodegradation	28 days	Biological Oxygen Demand	22 % BOD/ThBOD	OECD 301D - Closed Bottle Test
Carbon dioxide	124-38-9	Data not availbl- insufficient			N/A	

**12.3. Bioaccumulative potential**

Material	Cas No.	Test Type	Duration	Study Type	Test Result	Protocol
1,2-TRANS- DICHLOROETHYLENE	156-60-5	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	2.09	Other methods
METHYL NONAFLUOROISOBUT YL ETHER	163702-08-7	Estimated Bioconcentration		Log of Octanol/H2O part. coeff	4.0	Other methods
METHYL NONAFLUOROBUTYL ETHER	163702-07-6	Estimated Bioconcentration		Log of Octanol/H2O part. coeff	4.0	Other methods
Carbon dioxide	124-38-9	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	0.83	Other methods

**12.4. Mobility in soil**

Please contact manufacturer for more details

**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. 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.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Facility must be capable of handling aerosol cans. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. 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/CE 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
160504*	Gases in pressure containers (including halons) containing dangerous substances

#### EU waste code (product container after use)

150104	Metallic packaging
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## SECTION 14: Transportation information

ADR: UN1950; Aerosols; 2.2; (E); 5A.

IATA: UN1950; Aerosols; 2.2.

IMDG: UN1950; Aerosols; 2.2; FD, SU.

## SECTION 15: Regulatory information

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

## SECTION 16: Other information

### List of relevant H statements

H225	Highly flammable liquid and vapor.
H229	Pressurized container. may burst if heated.
H280	Contains gas under pressure; may explode if heated.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

### Revision information:

Section 06: Accidental release environmental information information was modified.

Section 08: Personal Protection - Skin/hand information information was modified.  
Section 08: Respiratory protection - recommended respirators information information was modified.  
Section 08: Skin protection - recommended gloves information information was deleted.  
Section 08: Skin protection - recommended gloves text information was deleted.  
Section 11: Acute Toxicity table information was modified.  
Section 12: Component ecotoxicity information information was modified.  
Section 16: UK disclaimer information was deleted.

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