

Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (1907/2006), as amended for GB.

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

1.1. Product identifier

3MTM NovecTM 4710 Insulating Gas

Product Identification Numbers

98-0212-4905-1 98-0212-4906-9 98-0212-4908-5

7100108890 7100117645 7100109636

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

Identified uses

For industrial use only. Not intended for use as a medical device or drug.

Restrictions on Use

3M Electronics Materials Solutions Division (EMSD) will not knowingly sample, support, or sell its products for incorporation in medical and pharmaceutical products and applications in which the 3M product will be temporarily or permanently implanted into humans or animals. The customer is responsible for evaluating and determining that a 3M EMSD product is suitable and appropriate for its particular use and intended application. The conditions of evaluation, selection, and use of a 3M product can vary widely and affect the use and intended application of a 3M product. Because many of these conditions are uniquely within the user's knowledge and control, it is essential that the user evaluate and determine whether the 3M product is suitable and appropriate for a particular use and intended application, and complies with all local applicable laws, regulations, standards, and guidance.

1.3. Details of the supplier of the safety data sheet

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.

 Telephone:
 +44 (0)1344 858 000

 E Mail:
 tox.uk@mmm.com

 Website:
 www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain

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:

Gas Under Pressure, Press. Gas (Liq.); H280 Acute Toxicity, Category 4 - Acute Tox. 4; H332

For full text of H phrases, see Section 16.

2.2. Label elements

The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain

SIGNAL WORD

WARNING.

Symbols

GHS04 (Gas cylinder) |GHS07 (Exclamation mark) |





Ingredient CAS Nbr EC No. % by Wt

Propanenitrile, 2,3,3,3-tetrafluoro-2-(trifluoromethyl)- 42532-60-5 806-451-7 99 - 100

HAZARD STATEMENTS:

H280 Contains gas under pressure; may explode if heated.

H332 Harmful if inhaled.

PRECAUTIONARY STATEMENTS

Prevention:

P261C Avoid breathing gas.

Storage:

P410 + P403 Protect from sunlight. Store in a well-ventilated place.

2.3. Other hazards

May cause frostbite.

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

Ingredient	Identifier(s)	%	Classification according to Regulation
			(EC) No. 1272/2008 [CLP], as
			amended for GB
Propanenitrile, 2,3,3,3-tetrafluoro-2-	(CAS-No.) 42532-60-5	99 - 100	Liquified gas, H280
(trifluoromethyl)-	(EC-No.) 806-451-7		Acute Tox. 4, H332
	,		

Any entry in the Identifier(s) column that begins with the numbers 6, 7, 8, or 9 are a Provisional List Number provided by ECHA pending publication of the official EC Inventory Number for the substance. 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

3.2. Mixtures

Not applicable

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

Thaw frosted skin with lukewarm water. Do not rub affected area. 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

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

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

The most important symptoms and effects based on the GB CLP classification include: Harmful if inhaled.

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.

Hazardous Decomposition or By-Products

SubstanceConditionCarbon monoxideDuring combustion.Carbon dioxide.During combustion.Hydrogen FluorideDuring combustion.

Toxic vapour, gas, particulate.

During combustion.

5.3. Advice for fire-fighters

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. 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. 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

Close cylinder. Place in a closed container approved for transportation by appropriate authorities. 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

Avoid inhalation of thermal decomposition products. For industrial/occupational use only. Not for consumer sale or use. Do not use in a confined area with minimal air exchange. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

7.2. Conditions for safe storage including any incompatibilities

Protect from sunlight. Store in a well-ventilated place. Store away from heat.

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 CAS Nbr Agency Limit type Additional comments

Propanenitrile, 2,3,3,3-tetrafluoro- 42532-60-5 Manufacturer TWA:65 ppm

2-(trifluoromethyl)- determined

UK HSC: UK Health and Safety Commission

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

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

For those situations where the material might be exposed to extreme overheating due to misuse or equipment failure, use with appropriate local exhaust ventilation sufficient to maintain levels of thermal decomposition products below their exposure guidelines. 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:

Full face shield.

Indirect vented goggles.

Applicable Norms/Standards

Use eye/face 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:

MaterialThickness (mm)Breakthrough TimePolymer laminateNo data availableNo data available

Applicable Norms/Standards Use gloves tested to EN 374

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:

For those situations where the material might be exposed to extreme overheating due to misuse or equipment failure, use a positive pressure supplied-air respirator.

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

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: filter type A

Thermal hazards

Wear cold insulating gloves/face shield/eye protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties Physical state

Gas.

3MTM NovecTM 4710 Insulating Gas

ColourColourlessOdorOdourless

Odour threshold *No data available.*

Melting point/freezing point -118 °C [Details: Freezing point]

Boiling point/boiling range
Flammability (solid, gas)
Not classified
Not applicable.
Not applicable.
Flammable Limits(UEL)
Not applicable.
Not applicable.
Not flash point
Autoignition temperature
Not applicable.
Not applicable.
Not applicable.
Not applicable.

pH substance/mixture is a gas

Kinematic Viscosity0.22 mm²/secWater solubility0.272 ppmSolubility- non-waterNo data available.Partition coefficient: n-octanol/waterNot applicable.Vapour pressure253 kPa [@, 20 °C]

Density 1.35 g/cm3 [*Details*:Liquid density under pressure.]

Relative density *No data available.*

Relative Vapour Density 8.16

9.2. Other information

9.2.1 Information with regard to physical hazard classes

Explosive properties Gas under pressure: Liquefied gas.

9.2.2 Other safety characteristics

EU Volatile Organic CompoundsNo data available.Evaporation rateNo data available.Molecular weight195.04 g/molePercent volatile100 %

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.

10.5 Incompatible materials

Water

10.6 Hazardous decomposition products

Substance Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

Extreme heat arising from situations such as misuse or equipment failure can generate hydrogen fluoride as a decomposition

product.

SECTION 11: Toxicological information

The information below may not agree with the 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 hazard classes as defined in the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain.

Signs and Symptoms of Exposure

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

Inhalation

Harmful if inhaled.

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

Skin contact

Frostbite: Signs/symptoms may include intense pain, discoloration of skin, and tissue destruction.

Eve contact

Frostbite: Signs/symptoms may include intense pain, clouding of the cornea, redness, swelling, and blindness.

Ingestion

No information available.

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
Propanenitrile, 2,3,3,3-tetrafluoro-2-(trifluoromethyl)-	Inhalation-	Rat	LC50 > 10,000 ppm
	Gas (4		
	hours)		

ATE = acute toxicity estimate

Skin Corrosion/Irritation

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

Serious Eve Damage/Irritation

	Scribus Lyc Damage II Hacton								
Name		Species	Value						
	Propanenitrile, 2,3,3,3-tetrafluoro-2-(trifluoromethyl)-	Rabbit	No significant irritation						

Skin Sensitisation

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

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

Propanenitrile, 2,3,3,3-tetrafluoro-2-(trifluoromethyl)-	In vivo	Not mutagenic
Propanenitrile, 2,3,3,3-tetrafluoro-2-(trifluoromethyl)-	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

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

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration			
Propanenitrile, 2,3,3,3-tetrafluoro-2- (trifluoromethyl)-	Inhalation	Not classified for male reproduction	Rat	NOAEL 1,498 ppm	28 days			
Propanenitrile, 2,3,3,3-tetrafluoro-2- (trifluoromethyl)-	Inhalation	Not classified for development	Rat	NOAEL 1,498 ppm	premating into lactation			
Propanenitrile, 2,3,3,3-tetrafluoro-2- (trifluoromethyl)-	Inhalation	Not classified for female reproduction	Rat	NOAEL 748 ppm	premating into lactation			

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Propanenitrile, 2,3,3,3- tetrafluoro-2-	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for	Rat	NOAEL 516 ppm	28 days
(trifluoromethyl)-			classification			

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Propanenitrile, 2,3,3,3- tetrafluoro-2- (trifluoromethyl)-	Inhalation	respiratory system	Not classified	Rat	NOAEL 516 ppm	28 days
Propanenitrile, 2,3,3,3-tetrafluoro-2-(trifluoromethyl)-	Inhalation	hematopoietic system immune system heart endocrine system gastrointestinal tract bone, teeth, nails, and/or hair liver muscles nervous system eyes kidney and/or bladder vascular system	Not classified	Rat	NOAEL 1,512 ppm	28 days

Aspiration Hazard

For the component/components, either no data is currently available or the data is 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.

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 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

Acute aquatic hazard:

As it is not possible to perform aquatic toxicity tests on NOVEC 4710 due to rapid hydrolysis upon forced dissolution in an aqueous environment, test data on the hydrolysis product CAS# 662-20-4 are used for the environmental classifications.

Chronic aquatic hazard:

As it is not possible to perform aquatic toxicity tests on NOVEC 4710 due to rapid hydrolysis upon forced dissolution in an aqueous environment, test data on the hydrolysis product CAS# 662-20-4 are used for the environmental classifications.

No product test data available.

Material	CAS#	Organism	Туре	Exposure	Test endpoint	Test result
Propanenitrile, 2,3,3,3-tetrafluoro- 2-(trifluoromethyl)-	42532-60-5	Chinese rare minnow	Transformation Product	96 hours	LC50	>127 mg/l
Propanenitrile, 2,3,3,3-tetrafluoro- 2-(trifluoromethyl)-	42532-60-5	Green algae	Transformation Product	72 hours	EC50	>100 mg/l
Propanenitrile, 2,3,3,3-tetrafluoro- 2-(trifluoromethyl)-	42532-60-5	Water flea	Transformation Product	48 hours	EC50	>100 mg/l
Propanenitrile, 2,3,3,3-tetrafluoro- 2-(trifluoromethyl)-	42532-60-5	Green algae	Transformation Product	72 hours	NOEC	10 mg/l
Propanenitrile, 2,3,3,3-tetrafluoro- 2-(trifluoromethyl)-	42532-60-5	Activated sludge	Transformation Product	3 hours	EC50	>1,000 mg/l
Propanenitrile, 2,3,3,3-tetrafluoro- 2-(trifluoromethyl)-	42532-60-5	Redworm	Transformation Product	14 days	LC50	64.7 mg/kg (Dry Weight)

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Propanenitrile,	42532-60-5	Transformation	28 days	BOD	4 %BOD/ThOD	OECD 301F - Manometric
2,3,3,3-tetrafluoro-		product				respirometry
2-(trifluoromethyl)-		Biodegradation				
Propanenitrile,	42532-60-5	Estimated		Photolytic half-life	20.8 years (t 1/2)	
2,3,3,3-tetrafluoro-		Photolysis		(in air)		
2-(trifluoromethyl)-						

12.3: Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Propanenitrile,	42532-60-5	Experimental		Log Kow	4.3	
2,3,3,3-tetrafluoro-		Bioconcentration				
2-(trifluoromethyl)-						
Propanenitrile,	42532-60-5	Transformation		Log Kow	1.7	830.7550 Part.Coef Shake
2,3,3,3-tetrafluoro-		product				Flask
2-(trifluoromethyl)-		Bioconcentration				

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
Propanenitrile,	42532-60-5	Transformation	Koc	42.4 l/kg	OECD 121 Estim. of Koc by
2,3,3,3-tetrafluoro-		product Mobility in			HPLC
2-(trifluoromethyl)-		Soil			

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

Material	CAS Nbr	Ozone Depletion Potential	Global Warming Potential
propanenitrile, 2,3,3,3-tetrafluoro-	42532-60-5		2100
2-(trifluoromethyl)-			

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

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. Combustion products will include HF. Facility must be capable of handling halogenated materials. The facility should be equipped to handle gaseous waste. 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)

16 05 04* Gases in pressure containers (including halons) containing dangerous substances

Gases in pressure containers other than those mentioned in 16 05 04

SECTION 14: Transportation information

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number	UN3163	UN3163	UN3163
14.2 UN proper shipping name	LIQUEFIED GAS, N.O.S.(PROPANENITRILE, 2,3,3,3-TETRAFLUORO-2- (TRIFLUOROMETHYL)-)	LIQUEFIED GAS, N.O.S.(PROPANENITRILE, 2,3,3,3-TETRAFLUORO-2- (TRIFLUOROMETHYL)-)	LIQUEFIED GAS, N.O.S.(PROPANENITRILE, 2,3,3,3- TETRAFLUORO-2- (TRIFLUOROMETHYL)-)
14.3 Transport hazard class(es)	2.2	2.2	2.2
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	Please refer to the other	Please refer to the other	Please refer to the other sections of the

precautions for user	sections of the SDS for further information.	sections of the SDS for further information.	SDS for further information.
14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code	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	2A	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

Global inventory status

Contact 3M for more information. 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.

COMAH Regulation, SI 2015/483

Seveso hazard categories, Annex 1, Part 1 None

Seveso named dangerous substances, Annex 1, Part 2 None

Regulation (EU) No 649/2012, as amended for GB

No chemicals listed

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this substance/mixture in accordance with Regulation (EC) No 1907/2006, as amended for GB.

SECTION 16: Other information

List of relevant H statements

H280 Contains gas under pressure; may explode if heated.

H332 Harmful if inhaled.

Revision information:

Formulation – Packaging/Repackaging: Section 16: Annex information was deleted.

GB Section 02: CLP Ingredient table information was added.

- GB Section 02: Other hazards phrase information was added.
- GB Section 04: First Aid Symptoms and Effects (GB CLP) information was added.
- GB Section 04: Information on toxicological effects information was added.
- GB Section 12: Acute aquatic hazard information information was added.
- GB Section 12: Chronic aquatic hazard information information was added.
- GB Section 12: Classification Warning information was added.
- GB Section 15: Chemical Safety Assessment information was added.
- GBSDS Section 14 Transport in bulk Main Heading information was added.
- GBSDS Section 14 UN Number information was added.
- Section 1: REACH registration number information was deleted.
- CLP: Ingredient table information was deleted.
- Section 2: Other hazards phrase information was deleted.
- Section 3: Composition/Information of ingredients table information was added.
- Section 3: Composition/Information of ingredients table information was deleted.
- Section 04: First Aid Symptoms and Effects (CLP) information was deleted.
- Section 04: Information on toxicological effects information was deleted.
- Section 5: Fire Special hazards information information was modified.
- Section 8: 8.2. Exposure controls information information was deleted.
- Section 8: 8.2.3. Environmental exposure controls information information was deleted.
- Section 8: DNEL table row information was deleted.
- Section 8: Personal Protection Respiratory Information information was modified.
- Section 8: PNEC table row information was deleted.
- Section 8: Respiratory protection recommended respirators information information was modified.
- Section 9: Flash point information information was modified.
- Section 11: Classification disclaimer information was deleted.
- Section 11: GB Classification disclaimer information was added.
- Section 11: GB No endocrine disruptor information available warning information was added.
- Section 11: No endocrine disruptor information available warning information was deleted.
- Section 12: 12.6. Endocrine Disrupting Properties information was deleted.
- Section 12: 12.6. Other adverse effects information was added.
- Section 12: 12.7. Other adverse effects information was deleted.
- Section 12: Acute aquatic hazard information information was deleted.
- Section 12: Chronic aquatic hazard information information was deleted.
- Section 12: Classification Warning information was deleted.
- Section 12: No endocrine disruptor information available warning information was added.
- Section 12: No endocrine disruptor information available warning information was deleted.
- Section 13: EU waste code (product as sold) information information was modified.
- Section 14 Marine transport in bulk according to IMO instruments Main Heading information was deleted.
- Section 14 UN Number information was deleted.
- Section 15: Chemical Safety Assessment information was deleted.
- Annex: Prediction of exposure statement information was deleted.
- Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was added.
- Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was deleted.
- Section 16: Web address information was added.
- Section 16: Web address information was deleted.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

3M TM Novec TM 4710 Insulating Gas					
3M SDSs for Great Britain are available at www.3M.com/uk For Northern Ireland documents, please contact your 3M representative to obtain a copy.					

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