

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 Novec Contact Cleaner

Product identification numbers

98-0212-3293-3 FF-9200-1180-7

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

Identified uses

Electronics cleaning only; not intended for use as a medical device or drug.

1.3. Details of the supplier of the substance or mixture

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

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

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

This product is not classified as hazardous according to EU Directive 1999/45/EC.

2.2. Label elements

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

Symbol(s)

None.

Contains:

No ingredients are assigned to the label.

Risk phrasesNone.Safety phrasesS2Keep out of the reach of children.

Special provisions concerning the labelling of certain substances

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Methyl nonafluoroisobutyl ether	163702-08-7	ELINCS 422-	50 - 70	
		270-2		
Methyl nonafluorobutyl ether	163702-07-6	ELINCS 422-	30 - 50	
		270-2		
Carbon dioxide	124-38-9	EINECS 204-	1 - 5	Liquified gas, H280 (Self
		696-9		Classified)

Please see section 16 for the full text of any R phrases and H statements referred to in this section Please refer to section 15 for the any applicable Notas that have been applied to the above components

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 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.

If swallowed

No need for first aid is anticipated.

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

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

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, tunic and trousers (leggings), 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. 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. 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 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

Avoid skin contact with hot material. For industrial or professional use only. Store work clothes separately from other clothing, food and tobacco products. Do not breathe dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. 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. Store away from strong bases.

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

Carbon dioxide 1	24-38-9	Health and Safety Comm. (UK)	TWA:9150 mg/m3(5000 ppm);STEL:27400 mg/m3(15000 ppm)	
Health and Safety Comm. (UK) : UK Health a TWA: Time-Weighted-Average STEL: Short Term Exposure Limit ppm: parts per million mg/m ³ : milligrams per cubic metre CEIL: Ceiling	and Safety Corr	mission		

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

As a good industrial hygiene practice: Wear eve/face protection.

The following eye protection(s) are recommended: Safety glasses with side shields.

Skin/hand protection

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials. Gloves made from the following material(s) are recommended: Neoprene. Nitrile rubber.

Respiratory protection

Use a positive pressure supplied-air respirator if there is a potential for over exposure from an uncontrolled release, exposure levels are not known, or under any other circumstances where air-purifying respirators may not provide adequate 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 and particulates Half facepiece or full facepiece supplied-air respirator

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

Thermal hazards

Wear heat insulating gloves when handling hot material to prevent thermal burns.

SECTION 9: Physical and chemical properties

Information on basic physical and chemics Physical state	Liquid.			
Specific Physical Form:	Aerosol			
Appearance/Odour	Clear, Colourless, Liquid with Slight Ethereal Odour, Content			
Appear ance/Outour	Under Pressure			
Odour threshold	No data available.			
	Not applicable.			
pH Poiling point/hoiling range	61 °C			
Boiling point/boiling range				
Melting point	Not applicable.			
Flammability (solid, gas)	Not applicable.			
Explosive properties	Not classified			
Oxidising properties	Not classified			
Flash point	No flash point			
Autoignition temperature	405 °C [Details:per ASTM E659-84 method]			
Flammable Limits(LEL)	[Details:None per ASTM 681-94 method @100C]			
Flammable Limits(UEL)	[Details:None per ASTM 681-94 method @100C]			
Vapour pressure	26,664.4 Pa [@ 25 °C] [Details:Internal Pressure for Aero			
	Can is approximately 75 psig @25C]			
Relative density	1.52 [@ 20 °C] [<i>Ref Std</i> :WATER=1]			
Water solubility	< 12 ppm			
Solubility- non-water	No data available.			
Partition coefficient: n-octanol/water	No data available.			
Evaporation rate	49 [<i>Ref Std</i> :BUOAC=1]			
Vapour density	8.6 [<i>Ref Std</i> :AIR=1]			
Decomposition temperature	No data available.			
Viscosity	0.001 Pa-s			
Density	1.52 g/ml			
Other information				
Volatile organic compounds (VOC)	[Details: Exempt]			
Percent volatile	100 %			
VOC less H2O & exempt solvents	[Details: Exempt]			

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 Not determined

10.5 Incompatible materials Strong bases.

10.6 Hazardous decomposition products

Substance Hydrogen Fluoride

Perfluoroisobutylene (PFIB).

<u>Condition</u> At elevated temperatures. - extreme condition of heat At elevated temperatures. - extreme condition of heat

If the product is exposed to extreme conditions 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 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

If thermal decomposition occurs: Harmful if inhaled. Intentional concentration and inhalation may be harmful or fatal.

Skin contact

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

Eye contact

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

Ingestion

No health effects are expected.

Toxicological Data

Acute Toxicity

Name	Route	Species	Value
Overall product	Inhalation-Vapor(4		Data not available or insufficient for
	hr)		classification; calculated ATE10 - 20 mg/l
Overall product	Ingestion		Data not available or insufficient for
			classification; calculated ATE >5,000
			mg/kg
Methyl nonafluoroisobutyl ether	Inhalation-Vapor (4	Rat	LC50 > 1,000 mg/l
	hours)		
Methyl nonafluoroisobutyl ether	Ingestion	Rat	LD50 > 5,000 mg/kg
Methyl nonafluorobutyl ether	Inhalation-Vapor (4	Rat	LC50 > 1,000 mg/l
	hours)		-
Methyl nonafluorobutyl ether	Ingestion	Rat	LD50 > 5,000 mg/kg

Carbon dioxide	Inhalation-Gas (4 hours)	Rat	LC50 > 53,000 ppm

 $\overline{\text{ATE}}$ = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Methyl nonafluoroisobutyl ether	Rabbit	No significant irritation
Methyl nonafluorobutyl ether	Rabbit	No significant irritation
Carbon dioxide		Data not available or insufficient for
		classification

Serious Eye Damage/Irritation

Name	Species	Value
Methyl nonafluoroisobutyl ether	Rabbit	No significant irritation
Methyl nonafluorobutyl ether	Rabbit	No significant irritation
Carbon dioxide		Data not available or insufficient for
		classification

Skin Sensitisation

Name	Species	Value
Methyl nonafluoroisobutyl ether	Guinea pig	Not sensitizing
Methyl nonafluorobutyl ether	Guinea pig	Not sensitizing
Carbon dioxide		Data not available or insufficient for
		classification

Respiratory Sensitisation

Name	Species	Value
Methyl nonafluoroisobutyl ether		Data not available or insufficient for
		classification
Methyl nonafluorobutyl ether		Data not available or insufficient for
		classification
Carbon dioxide		Data not available or insufficient for
		classification

Germ Cell Mutagenicity

Name	Route	Value
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
Carbon dioxide		Data not available or insufficient for
		classification

Carcinogenicity

Name	Route	Species	Value
Methyl nonafluoroisobutyl ether			Data not available or insufficient for
			classification
Methyl nonafluorobutyl ether			Data not available or insufficient for
			classification
Carbon dioxide			Data not available or insufficient for
			classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Methyl	Ingestion	Not toxic to female	Rat	NOAEL	28 days
nonafluoroisobutyl		reproduction		1,000	

ether				mg/kg/day	
Methyl nonafluoroisobutyl ether	Inhalation	Not toxic to female reproduction	Rat	NOAEL 129 mg/l	1 generation
Methyl nonafluoroisobutyl ether	Ingestion	Not toxic to male reproduction	Rat	NOAEL 1,000 mg/kg/day	28 days
Methyl nonafluoroisobutyl ether	Inhalation	Not toxic to male reproduction	Rat	NOAEL 129 mg/l	1 generation
Methyl nonafluoroisobutyl ether	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 307 mg/l	during gestation
Methyl nonafluorobutyl ether	Ingestion	Not toxic to female reproduction	Rat	NOAEL 1,000 mg/kg/day	28 days
Methyl nonafluorobutyl ether	Inhalation	Not toxic to female reproduction	Rat	NOAEL 129 mg/l	1 generation
Methyl nonafluorobutyl ether	Ingestion	Not toxic to male reproduction	Rat	NOAEL 1,000 mg/kg/day	28 days
Methyl nonafluorobutyl ether	Inhalation	Not toxic to male reproduction	Rat	NOAEL 129 mg/l	1 generation
Methyl nonafluorobutyl ether	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 307 mg/l	during gestation
Carbon dioxide	Inhalation	Some positive male reproductive data exist, but the data are not sufficient for classification	Mouse	LOAEL 350,000 ppm	not available
Carbon dioxide	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	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
Methyl nonafluoroiso butyl ether	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Dog	LOAEL 913 mg/l	10 minutes
Methyl nonafluoroiso butyl ether	Inhalation	cardiac sensitization	All data are negative	Dog	NOAEL 913 mg/l	10 minutes
Methyl nonafluorobut yl ether	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Dog	LOAEL 913 mg/l	10 minutes
Methyl nonafluorobut	Inhalation	cardiac sensitization	All data are negative	Dog	NOAEL 913 mg/l	10 minutes

yl ether			

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Methyl nonafluoroiso butyl ether	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 155 mg/l	13 weeks
Methyl nonafluoroiso butyl ether	Inhalation	bone, teeth, nails, and/or hair	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 129 mg/l	11 weeks
Methyl nonafluoroiso butyl ether	Inhalation	heart skin endocrine system hematopoietic system immune system muscles nervous system eyes kidney and/or bladder respiratory system	All data are negative	Rat	NOAEL 155 mg/l	13 weeks
Methyl nonafluoroiso butyl ether	Ingestion	endocrine system liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	28 days
Methyl nonafluoroiso butyl ether	Ingestion	heart hematopoietic system immune system nervous system eyes kidney and/or bladder respiratory system	All data are negative	Rat	NOAEL 1,000 mg/kg/day	28 days
Methyl nonafluorobut yl ether	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 155 mg/l	13 weeks
Methyl nonafluorobut yl ether	Inhalation	bone, teeth, nails, and/or hair	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 129 mg/l	11 weeks
Methyl nonafluorobut yl ether	Inhalation	heart skin endocrine system hematopoietic system immune system muscles nervous system eyes kidney and/or bladder	All data are negative	Rat	NOAEL 155 mg/l	13 weeks

		respiratory system				
Methyl nonafluorobut yl ether	Ingestion	endocrine system liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	28 days
Methyl nonafluorobut yl ether	Ingestion	heart hematopoietic system immune system nervous system eyes kidney and/or bladder respiratory system	All data are negative	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	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 60,000 ppm	166 days

Aspiration Hazard

Name	Value
Methyl nonafluoroisobutyl ether	Not an aspiration hazard
Methyl nonafluorobutyl ether	Not an aspiration hazard
Carbon dioxide	Not an 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

Material	Organism	Туре	Exposure	Test endpoint	Test result
3M Novec	Fathead minnow	Laboratory	96 hours	LC50	mg/l
Contact Cleaner		-			
3M Novec	Green algae	Laboratory	96 hours	IC50	mg/l
Contact Cleaner					
3M Novec	Water flea	Laboratory	48 hours	EC50	mg/l
Contact Cleaner					

Material	CAS Nbr	Organism	Туре	Exposure	Test endpoint	Test result
Methyl	163702-07-6	Water flea	Experimental	48 hours	EC50	>10 mg/l
nonafluorobuty						
l ether						
Methyl	163702-07-6	Fathead	Experimental	96 hours	LC50	>7.9 mg/l

nonafluorobuty l ether		minnow				
Methyl nonafluorobuty l ether	163702-07-6	Green Algae	Experimental	96 hours	EC50	>8.9 mg/l
Carbon dioxide	124-38-9	Fish	Experimental	96 hours	LC50	112.2 mg/l
Methyl nonafluoroisob utyl ether	163702-08-7	Fathead minnow	Experimental	96 hours	LC50	>7.9 mg/l
Methyl nonafluoroisob utyl ether	163702-08-7	Water flea	Experimental	48 hours	EC50	>10 mg/l
Methyl nonafluoroisob utyl ether	163702-08-7	Green Algae	Experimental	96 hours	EC50	>8.9 mg/l
Methyl nonafluorobuty l ether	163702-07-6	Green Algae	Experimental	96 hours	NOEC	>8.9 mg/l
Carbon dioxide	124-38-9	Atlantic Salmon	Experimental	43 days	NOEC	26 mg/l
Methyl nonafluoroisob utyl ether	163702-08-7	Green Algae	Experimental	96 hours	NOEC	>8.9 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Carbon dioxide	124-38-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Methyl nonafluorobuty l ether	163702-07-6	Experimental Biodegradation	28 days	BOD	22 % weight	OECD 301D - Closed bottle test
Methyl nonafluoroisob utyl ether	163702-08-7	Experimental Biodegradation	28 days	BOD	22 % weight	OECD 301D - Closed bottle test

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Carbon dioxide	124-38-9	Experimental		Log Kow	0.83	Other methods
		Bioconcentrati				
		on				
Methyl	163702-07-6	Experimental		Log Kow	3.54	Other methods
nonafluorobuty		Bioconcentrati				
l ether		on				
Methyl	163702-08-7	Experimental		Log Kow	3.54	Other methods
nonafluoroisob		Bioconcentrati				
utyl ether		on				

12.4. Mobility in soil

Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

No information available at this time, contact manufacturer for more details

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

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/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)

070603* Organic halogenated solvents, washing liquids and mother liquors

SECTION 14: Transportation information

98-0212-3293-3

ADR/RID: UN1950, AEROSOLS, LIMITED QUANTITY, 2.2, (E), ADR Classification Code: 5A. IMDG-CODE: UN1950, AEROSOLS, 2.2, LIMITED QUANTITY, EMS: FD,SU. ICAO/IATA: UN1950, AEROSOLS, NON-FLAMMABLE, 2.2.

FF-9200-1180-7

ADR/RID: UN1950, AEROSOLS, LIMITED QUANTITY, 2.2, (E), ADR Classification Code: 5A. IMDG-CODE: UN1950, AEROSOLS, 2.2, LIMITED QUANTITY, EMS: FD,SU. ICAO/IATA: UN1950, AEROSOLS, NON-FLAMMABLE, 2.2.

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.

List of ingredients according to Annex VII D of the regulation on detergents 648/2004/EC

The following ingredient information is provided per Regulation EC No. 648/2004 on Detergents:

Ingredient

CAS No. Concentration

Methyl perfluoroisobutyl ether	163702-08-7	>10%
Methyl perfluorobutyl ether	163702-07-6	>10%
Carbon dioxide	124-38-9	1-10%

15.2. Chemical Safety Assessment

Not applicable

SECTION 16: Other information

List of relevant H statements

H280

Contains gas under pressure; may explode if heated.

Revision information:

Revision Changes: Section 1: Product identification numbers information was modified. Section 12: Persistence and Degradability information information was modified. Section 16: Regulations - Inventories - EU ONLY information was modified. Section 11: Acute Toxicity table information was modified. Serious Eye Damage/Irritation Table information was modified. Germ Cell Mutagenicity Table information was modified. Skin Sensitisation Table information was modified. Reproductive Toxicity Table information was modified. Skin Corrosion/Irritation Table information was modified. Target Organs - Repeated Table information was modified. Target Organs - Single Table information was modified. Section 11: Health Effects - Eye information information was modified. Section 11: Health Effects - Inhalation information information was modified. Section 5: Fire - Extinguishing media information information was modified. Section 5: Fire - Advice for fire fighters information information was modified. Section 6: Accidental release personal information information was modified. Section 6: Accidental release environmental information information was modified. Section 6: Accidental release clean-up information information was modified. Section 7: Precautions safe handling information information was modified. Section 7: Conditions safe storage information was modified. Section 8: Personal Protection - Thermal hazards information information was modified. Section 13: Standard Phrase Category Waste GHS information was modified. Section 8: Skin protection - protective clothing text information was added. Section 8: Personal Protection - Eye information information was added. Section 8: Personal Protection - Respiratory Information information was added. Section 10: Hazardous Decomposition Products information information was added. Section 12: Acute aquatic hazard information information was deleted. Section 12: Chronic aquatic hazard heading information was deleted. Section 12: Acute aquatic hazard heading information was deleted. Section 12: Chronic aquatic hazard information information was deleted. Section 8: Personal Protection - Skin/hand information 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.

3M United Kingdom MSDSs are available at www.3M.com/uk