



Safety Data Sheet

Copyright, 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:	28-5313-3	Version number:	4.00
Revision date:	30/03/2015	Supersedes date:	28/03/2014
Transportation version number:	2.00 (09/08/2015)		

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 Stainless Steel Cleaner

Product Identification Numbers

YP-2080-6172-8

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

Identified uses

Metal Polish

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

CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:

Aerosol, Category 2 - Aerosol 2; H223, H229

For full text of H phrases, see Section 16.

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

Indication of danger

Flammable; R10

For full text of R phrases, see Section 16.

2.2. Label elements

CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

WARNING!

Symbols:

GHS02 (Flame) |

Pictograms



HAZARD STATEMENTS:

H223 Flammable aerosol.
H229 Pressurised container. may burst if heated.

PRECAUTIONARY STATEMENTS

General:

P102 Keep out of reach of children.

Prevention:

P210A Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.

Storage:

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

Notes on labelling

Updated per Regulation (EC) No. 648/2004 on detergents. H304 is not required on the label because the product is an aerosol.

Ingredients required per 648/2004: >30%: Aliphatic hydrocarbons. <5%: Non-ionic surfactant. Contains: Perfumes, d-limonene.

Test data indicates that product meets the criteria for flammable aerosol.

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

Symbol(s)



Flammable
(for aerosols)

Contains:

No ingredients are assigned to the label.

Risk phrases

R10 Flammable.

3M Stainless Steel Cleaner

Safety phrases

S16	Keep away from sources of ignition - No Smoking.
S23C	Do not breathe vapour or spray.
S51	Use only in well ventilated areas.
S46	If swallowed, seek medical advice immediately and show this container or label.
S2	Keep 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. Do not spray on a naked flame or any incandescent material.

Notes on labelling

R65 is not required on the label because the product is an aerosol.

Updated per Regulation (EC) 648/2004 on detergents.

Ingredients required per 648/2004 (not required on industrial label): >30%: Aliphatic hydrocarbons. <5%: Non-ionic surfactant. Contains: Perfumes, d-limonene.

Test data indicates that product meets the criteria for flammable aerosol.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Water	Mixture		40 - 70	
White mineral oil (petroleum)	8042-47-5	EINECS 232-455-8	10 - 30	Xn:R65 (Self Classified) Asp. Tox. 1, H304 (Self Classified)
Butane	106-97-8	EINECS 203-448-7	5 - 10	F+:R12 - Nota C (EU) Flam. Gas 1, H220; Liquified gas, H280 - Nota C,U (CLP)
Propane	74-98-6	EINECS 200-827-9	1 - 5	F+:R12 (EU) Flam. Gas 1, H220; Liquified gas, H280 - Nota U (CLP)
Isobutane	75-28-5	EINECS 200-857-2	1 - 5	F+:R12 - Nota C (EU) Flam. Gas 1, H220; Liquified gas, H280 - Nota C,U (CLP)
Sorbitan Oleate	1338-43-8	EINECS 215-665-4	0.5 - 1.5	

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

3M Stainless Steel Cleaner

Inhalation

Remove person to fresh air. Get medical attention.

Skin contact

No need for first aid is anticipated.

Eye contact

No need for first aid is anticipated.

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. Extinguishing media

Use a fire fighting agent suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

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

5.3. Advice for fire-fighters

No special protective actions for fire-fighters are anticipated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Warning: A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

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 using non-sparking tools. Place in a closed container approved for transportation by appropriate authorities. Clean

3M Stainless Steel Cleaner

up residue with water. 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

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 contact with oxidising agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. 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. 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
Butane	106-97-8	UK HSC	TWA:1450 mg/m ³ (600 ppm);STEL:1810 mg/m ³ (750 ppm)	
Propane	74-98-6	UK HSC	Limit value not established:	asphyxiant

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

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.

3M Stainless Steel Cleaner

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:

Material	Thickness (mm)	Breakthrough Time
Nitrile rubber.	No data available	No data available

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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Aerosol
Appearance/Odour	Thick white emulsion; citrus odour
Odour threshold	<i>No data available.</i>
pH	9 - 11
Boiling point/boiling range	approximately 100 °C
Melting point	<i>No data available.</i>
Flammability (solid, gas)	Not applicable.
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	<i>No data available.</i>
Autoignition temperature	<i>No data available.</i>
Flammable Limits(LEL)	<i>No data available.</i>
Flammable Limits(UEL)	<i>No data available.</i>
Vapour pressure	<i>No data available.</i>
Relative density	approximately 1 [<i>Ref Std: WATER=1</i>]
Water solubility	Complete
Solubility- non-water	<i>No data available.</i>
Partition coefficient: n-octanol/water	<i>No data available.</i>
Evaporation rate	<i>No data available.</i>
Vapour density	<i>No data available.</i>
Decomposition temperature	<i>No data available.</i>
Viscosity	< 4.5 Pa-s [<i>Details: For liquid</i>]
Density	approximately 0.95 g/ml

9.2. Other information

Volatile organic compounds (VOC)	98 g/l [<i>Test Method: calculated per CARB title 2</i>]
Percent volatile	11.55 % weight
VOC less H ₂ O & exempt solvents	<i>Not applicable.</i>

SECTION 10: Stability and reactivity

3M Stainless Steel Cleaner

10.1 Reactivity

This material is considered to be non reactive under normal use conditions

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 acids.

Strong oxidising agents.

10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
------------------	------------------

None known.	
-------------	--

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 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

May cause target organ effects after inhalation. 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

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

Ingestion

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

Additional Health Effects:

Single exposure may cause target organ effects:

Single exposure, above recommended guidelines, may cause:

3M Stainless Steel Cleaner

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	Ingestion		No data available; calculated ATE >5,000 mg/kg
White mineral oil (petroleum)	Dermal	Rabbit	LD50 > 2,000 mg/kg
White mineral oil (petroleum)	Ingestion	Rat	LD50 > 5,000 mg/kg
Butane	Inhalation-Gas (4 hours)	Rat	LC50 277,000 ppm
Isobutane	Inhalation-Gas (4 hours)	Rat	LC50 276,000 ppm
Propane	Inhalation-Gas (4 hours)	Rat	LC50 > 200,000 ppm
Sorbitan Oleate	Ingestion	Rat	LD50 > 39,800 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
White mineral oil (petroleum)	Rabbit	No significant irritation
Butane	Professional judgement	No significant irritation
Isobutane	Professional judgement	No significant irritation
Propane	Rabbit	Minimal irritation

Serious Eye Damage/Irritation

Name	Species	Value
White mineral oil (petroleum)	Rabbit	Mild irritant
Butane	Rabbit	No significant irritation
Isobutane	Professional judgement	No significant irritation
Propane	Rabbit	Mild irritant

Skin Sensitisation

Name	Species	Value
White mineral oil (petroleum)	Guinea pig	Not sensitizing

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
White mineral oil (petroleum)	In Vitro	Not mutagenic
Butane	In Vitro	Not mutagenic

3M Stainless Steel Cleaner

Isobutane	In Vitro	Not mutagenic
Propane	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
White mineral oil (petroleum)	Dermal	Mouse	Not carcinogenic
White mineral oil (petroleum)	Inhalation	Multiple animal species	Not carcinogenic

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

Name	Route	Value	Species	Test result	Exposure Duration
White mineral oil (petroleum)	Ingestion	Not toxic to female reproduction	Rat	NOAEL 4,350 mg/kg/day	13 weeks
White mineral oil (petroleum)	Ingestion	Not toxic to male reproduction	Rat	NOAEL 4,350 mg/kg/day	13 weeks
White mineral oil (petroleum)	Ingestion	Not toxic to development	Rat	NOAEL 4,350 mg/kg/day	during gestation

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

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Butane	Inhalation	cardiac sensitization	Causes damage to organs	Human	NOAEL Not available	
Butane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Butane	Inhalation	heart	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 5,000 ppm	25 minutes
Butane	Inhalation	respiratory irritation	All data are negative	Rabbit	NOAEL Not available	
Isobutane	Inhalation	cardiac sensitization	Causes damage to organs	Multiple animal species	NOAEL Not available	
Isobutane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Isobutane	Inhalation	respiratory irritation	All data are negative	Mouse	NOAEL Not available	
Propane	Inhalation	cardiac sensitization	Causes damage to organs	Human	NOAEL Not available	
Propane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Propane	Inhalation	respiratory irritation	All data are negative	Human	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
White mineral oil (petroleum)	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,381 mg/kg/day	90 days
White mineral oil (petroleum)	Ingestion	liver immune system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,336 mg/kg/day	90 days
Butane	Inhalation	kidney and/or	Some positive data exist, but the	Rat	NOAEL	90 days

3M Stainless Steel Cleaner

		bladder	data are not sufficient for classification		4,489 ppm	
Butane	Inhalation	blood	All data are negative	Rat	NOAEL 4,489 ppm	90 days
Isobutane	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 4,500 ppm	13 weeks

Aspiration Hazard

Name	Value
White mineral oil (petroleum)	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 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 Nbr	Organism	Type	Exposure	Test endpoint	Test result
Butane	106-97-8		Data not available or insufficient for classification			
Isobutane	75-28-5		Data not available or insufficient for classification			
Propane	74-98-6		Data not available or insufficient for classification			
Sorbitan Oleate	1338-43-8	Rainbow trout	Experimental	96 hours	LC50	>100 mg/l
White mineral oil (petroleum)	8042-47-5	Bluegill	Experimental	96 hours	Lethal Level 50%	>100 mg/l
White mineral oil (petroleum)	8042-47-5	Water flea	Experimental	21 days	NOEC	>100 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Sorbitan Oleate	1338-43-8	Estimated Biodegradation	28 days	BOD	81 % weight	OECD 301C - MITI test (I)
White mineral oil (petroleum)	8042-47-5	Experimental Biodegradation	28 days	CO2 evolution	0 % weight	OECD 301B - Modified sturm or CO2
Propane	74-98-6	Experimental Photolysis		Photolytic half-life (in air)	27.5 days (t 1/2)	Other methods
Isobutane	75-28-5	Experimental Photolysis		Photolytic half-life (in air)	13.7 days (t 1/2)	Other methods

3M Stainless Steel Cleaner

Butane	106-97-8	Experimental Photolysis		Photolytic half-life (in air)	6.3 days (t 1/2)	Other methods
--------	----------	----------------------------	--	-------------------------------	------------------	---------------

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Sorbitan Oleate	1338-43-8	Estimated Bioconcentration		Bioaccumulation factor	9.8	Estimated: Bioconcentration factor
White mineral oil (petroleum)	8042-47-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Propane	74-98-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Isobutane	75-28-5	Experimental BCF - Other		Bioaccumulation factor	1.97	Other methods
Butane	106-97-8	Experimental Bioconcentration		Log Kow	2.88	Other methods

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.

The surfactant(s) contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

See Section 11.1 Information on toxicological effects

Incinerate in a permitted waste incineration facility. Facility must be capable of handling aerosol cans. 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

3M Stainless Steel Cleaner

EU waste code (product container after use)

15 01 04 Metallic packaging

SECTION 14: Transportation information

YP-2080-6172-8

ADR/RID: UN1950, AEROSOLS, LIMITED QUANTITY, 2.1, (E), ADR Classification Code: 5F.

IMDG-CODE: UN1950, AEROSOLS, 2.1, IMDG-Code segregation code: NONE, LIMITED QUANTITY, EMS: FD,SU.

ICAO/IATA: UN1950, AEROSOLS, FLAMMABLE, 2.1.

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.

15.2. Chemical Safety Assessment

Not applicable

SECTION 16: Other information

List of relevant H statements

H220	Extremely flammable gas.
H223	Flammable aerosol.
H229	Pressurised container. may burst if heated.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.

List of relevant R-phrases

R10	Flammable.
R12	Extremely flammable.
R65	Harmful: May cause lung damage if swallowed.

Revision information:

Revision Changes:

Section 8: Eye/face protection information information was modified.

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

Sections 3 and 9: Odour, colour, grade information information was modified.

Section 01: 1.3. Details of the supplier of the safety data sheet heading information was modified.

Section 3: Composition/ Information of ingredients table information was modified.

Section 12: Persistence and Degradability information information was modified.

Section 12:Biocumulative potential information information was modified.

Section 2: Other hazards phrase information was modified.

Section 2: EU Detergent Regulation label remarks information was modified.

Copyright information was modified.

Section 15: Label remarks and EU Detergent information was modified.

Section 8: Occupational exposure limit table information was modified.

OEL Reg Agency Desc information was modified.

Telephone header information was modified.

Company Telephone information was modified.

Section 11: Serious Eye Damage/Irritation Table information was modified.

Section 11: Additional Health Effects heading information was modified.
Section 11: Skin Corrosion/Irritation Table information was modified.
Section 11: Health Effects - Eye information information was modified.
Section 11: Health Effects - Skin information information was modified.
Section 11: Health Effects - Inhalation 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 8: Personal Protection - Skin/hand information information was modified.
Section 4: First aid for eye contact information information was modified.
Section 4: First aid for skin contact information information was modified.
Section 11: Single exposure may cause target organ effects heading information was modified.
Section 8: Skin protection - recommended gloves text information was added.
Section 8: Occupational exposure limit table information was added.
Section 12: No PBT/vPvB information available warning information was added.
Section 12: Classification Warning information was added.
Section 11: Classification disclaimer information was added.
Section 11: Aspiration Hazard table - Name heading information was added.
Section 11: Aspiration Hazard table - Value heading information was added.
Section 11: Respiratory Sensitization text information was added.
Section 11: Skin Sensitization table - Name heading information was added.
Section 11: Skin Sensitization table - Species heading information was added.
Section 11: Skin Sensitization table - Value heading information was added.
Section 11: Serious Eye Damage/Irritation table - Name heading information was added.
Section 11: Serious Eye Damage/Irritation table - Species heading information was added.
Section 11: Serious Eye Damage/Irritation table - Value heading information was added.
Section 11: Skin Corrosion/Irritation table - Name heading information was added.
Section 11: Skin Corrosion/Irritation table - Species heading information was added.
Section 11: Skin Corrosion/Irritation table - Value heading information was added.
Section 11: Germ Cell Mutagenicity table - Name heading information was added.
Section 11: Germ Cell Mutagenicity table - Route heading information was added.
Section 11: Germ Cell Mutagenicity table - Value heading information was added.
Section 11: Specific Target Organ Toxicity - repeated exposure table - Name heading information was added.
Section 11: Specific Target Organ Toxicity - repeated exposure table - Route heading information was added.
Section 11: Specific Target Organ Toxicity - repeated exposure table - Target Organ(s) heading information was added.
Section 11: Specific Target Organ Toxicity - repeated exposure table - Value heading information was added.
Section 11: Specific Target Organ Toxicity - repeated exposure table - Species heading information was added.
Section 11: Specific Target Organ Toxicity - repeated exposure table - Test Result heading information was added.
Section 11: Specific Target Organ Toxicity - repeated exposure table - Exposure Duration heading information was added.
Section 11: Specific Target Organ Toxicity - single exposure table - Name heading information was added.
Section 11: Specific Target Organ Toxicity - single exposure table - Route heading information was added.
Section 11: Specific Target Organ Toxicity - single exposure table - Target Organ(s) heading information was added.
Section 11: Specific Target Organ Toxicity - single exposure table - Value heading information was added.
Section 11: Specific Target Organ Toxicity - single exposure table - Species heading information was added.
Section 11: Specific Target Organ Toxicity - single exposure table - Test Result heading information was added.
Section 11: Specific Target Organ Toxicity - single exposure table - Exposure Duration heading information was added.
Section 11: Reproductive and/or Developmental Effects table - Name heading information was added.
Section 11: Reproductive and/or Developmental Effects table - Route heading information was added.
Section 11: Reproductive and/or Developmental Effects table - Value heading information was added.
Section 11: Reproductive and/or Developmental Effects table - Species heading information was added.
Section 11: Reproductive and/or Developmental Effects table - Test Result heading information was added.
Section 11: Reproductive and/or Developmental Effects text information was added.
Section 11: Carcinogenicity table - Name heading information was added.
Section 11: Carcinogenicity table - Route heading information was added.
Section 11: Carcinogenicity table - Species heading information was added.
Section 11: Carcinogenicity table - Value heading information was added.
Section 8: glove data - Material heading information was added.

Section 8: glove data - Thickness heading information was added.
Section 8: glove data - Breakthrough Time heading information was added.
Section 8: glove data value information was added.
Section 11: Classification disclaimer information was deleted.
Section 11: Exposure Duration table heading information was deleted.
Section 11: Test Result table heading information was deleted.
Section 12: Classification Warning information was deleted.
Section 12: PBT/vPvB table CAS No. column heading information was deleted.
Section 12: PBT/vPvB table CAS No. column heading information was deleted.
Section 12: PBT/vPvB table PBT/vPvB Status column heading information was deleted.
Section 12: PBT/vPvB table row information was deleted.
Section 8: Personal Protection - Thermal hazards information information was deleted.
Section 8: Personal Protection - Thermal hazards 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