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
3M Scotch 1633

Product Identification Numbers
DE-2729-1247-3

7100047862

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

Identified uses
Rust remover.

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.
The aspiration hazard classification is not required because the product is an aerosol.

CLASSIFICATION:
Aerosol, Category 1 - Aerosol 1; H222, H229
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336
Hazardous to the Aquatic Environment (Chronic), Category 2 - Aquatic Chronic 2; H411

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
DANGER.

Symbols
GHS02 (Flame) |GHS07 (Exclamation mark) |GHS09 (Environment) |

Pictograms

Ingredient	CAS Nbr	EC No.	% by Wt
Distillates (petroleum), hydro- treated light	64742-47-8	265-149-8	30 - 60
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	265-156-6	10 - 30
isobutane	75-28-5	200-857-2	10 - 30
propane	74-98-6	200-827-9	10 - 30
butane	106-97-8	203-448-7	1 - 10
2-butoxyethanol	111-76-2	203-905-0	1 - 5
Molybdenum disulphide	1317-33-5	215-263-9	< 1

HAZARD STATEMENTS:

H222	Extremely flammable aerosol.
H229	Pressurised container: may burst if heated.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS
General:

P102	Keep out of reach of children.

Prevention:

P210	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 50°C/122°F.

Disposal:

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

1% of the mixture consists of components of unknown acute dermal toxicity.
47% of the mixture consists of components of unknown acute inhalation toxicity.

Notes on labelling
Updated per Regulation (EC) No. 648/2004 as amended for Great Britain on detergents.
Nota L applied to CAS 64742-53-6

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
Not applicable

3.2. Mixtures

Ingredient	Identifier(s)	%	Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB
Distillates (petroleum), hydro- treated light	(CAS-No.) 64742-47-8 (EC-No.) 265-149-8	30 - 60	Asp. Tox. 1, H304 Aquatic Chronic 2, H411 Flam. Liq. 3, H226 Skin Irrit. 2, H315 STOT SE 3, H336
Distillates (petroleum), hydrotreated light naphthenic	(CAS-No.) 64742-53-6 (EC-No.) 265-156-6	10 - 30	Nota L Acute Tox. 4, H332 Asp. Tox. 1, H304
isobutane	(CAS-No.) 75-28-5 (EC-No.) 200-857-2	10 - 30	Flam. Gas 1A, H220 Liquified gas, H280 Nota C,U
propane	(CAS-No.) 74-98-6 (EC-No.) 200-827-9	10 - 30	Flam. Gas 1A, H220 Liquified gas, H280 Nota U
butane	(CAS-No.) 106-97-8 (EC-No.) 203-448-7	1 - 10	Flam. Gas 1A, H220 Liquified gas, H280 Nota C,U
2-butoxyethanol	(CAS-No.) 111-76-2 (EC-No.) 203-905-0	1 - 5	Acute Tox. 4, H302(LD50 = 1200 mg/kg **ATE values per GB MCL**) Skin Irrit. 2, H315 Eye Irrit. 2, H319
Molybdenum disulphide	(CAS-No.) 1317-33-5 (EC-No.) 215-263-9	< 1	Substance with a national occupational exposure limit

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. 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
No critical symptoms or effects. 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

Substance	Condition
Carbon monoxide	During combustion.
Carbon dioxide.	During combustion.

5.3. Advice for fire-fighters
Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

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
For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available. Contain spill. Cover spill area with a fire-extinguishing foam. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

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
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. Keep container tightly closed. Protect from sunlight. Do not expose to temperatures exceeding 50ºC/122ºF. 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/m³(600 ppm);STEL:1810 mg/m³(750 ppm)	
2-butoxyethanol	111-76-2	UK HSC	TWA:123 mg/m3(25 ppm);STEL:246 mg/m3(50 ppm)	SKIN
Molybdem, insoluble compounds	1317-33-5	UK HSC	TWA(as Mo):10 mg/m3;STEL(as Mo):20 mg/m3	
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

Ingredient	CAS Nbr	Agency	Determinant	Biological Specimen	Sampling Time	Value	Additional comments

2-butoxyethanol	111-76-2	UK EH40 BMGVs	Butoxyacetic acid	Creatinine in urine	EOS	240 mmol/mol

UK EH40 BMGVs : UK. EH40 Biological Monitoring Guidance Values (BMGVs)
EOS: End of shift.

8.2. Exposure controls

8.2.1. Engineering controls
Provide ventilated enclosure for heat curing. Curing enclosures must be exhausted to outdoors or to a suitable emission control device. 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:
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:

Material	Thickness (mm)	Breakthrough Time
Polymer laminate	No data available	No 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:
Half facepiece or full facepiece air-purifying respirator suitable for organic vapours
Half facepiece or full facepiece supplied-air respirator
Organic vapour respirators may have short service life.

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
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	Liquid.
Specific Physical Form:	Aerosol
Colour	Yellow
Odor	Petroleum
Odour threshold	*No data available.*
Melting point/freezing point	*No data available.*
Boiling point/boiling range	*No data available.*
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	1.2 % volume [*Details:*Conditions: Propane/Butane]
Flammable Limits(UEL)	*No data available.*
Flash point	-104 ºC [*Details:*Based on propane]
Autoignition temperature	*No data available.*
Decomposition temperature	*No data available.*
pH	*substance/mixture is non-soluble (in water)*
Kinematic Viscosity	*Not applicable.*
Water solubility	Nil
Solubility- non-water	*No data available.*
Partition coefficient: n-octanol/water	*No data available.*
Vapour pressure	*No data available.*
Relative density	0.7 [*Ref Std:*WATER=1]
Relative Vapour Density	*No data available.*

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds	*No data available.*
Evaporation rate	*No data available.*
Percent volatile	*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 polymerisation will not occur.

10.4 Conditions to avoid
Heat.
High shear and high temperature conditions
Temperatures above the boiling point.

10.5 Incompatible materials
Strong acids.
Explosive when mixed with oxidizing substances.

10.6 Hazardous decomposition products

Substance	Condition
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 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
May be harmful if inhaled. Simple asphyxiation: Signs/symptoms may include increased heart rate, rapid respirations, drowsiness, headache, incoordination, altered judgement, nausea, vomiting, lethargy, seizures, coma, and may be fatal. Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below).

Skin contact
Frostbite: Signs/symptoms may include intense pain, discoloration of skin, and tissue destruction. Mild Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, and dryness.

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

Ingestion
Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:
Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness. Single exposure, above recommended guidelines, may cause: Cardiac Sensitization: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

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

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation-Dust/Mist(4 hr)		No data available; calculated ATE >5 - =12.5 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Distillates (petroleum), hydro- treated light	Dermal	Rabbit	LD50 > 3,160 mg/kg

Distillates (petroleum), hydro- treated light	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 3 mg/l
Distillates (petroleum), hydro- treated light	Ingestion	Rat	LD50 > 5,000 mg/kg
isobutane	Inhalation-Gas (4 hours)	Rat	LC50 276,000 ppm
propane	Inhalation-Gas (4 hours)	Rat	LC50 > 200,000 ppm
Distillates (petroleum), hydrotreated light naphthenic	Dermal	Rabbit	LD50 > 2,000 mg/kg
Distillates (petroleum), hydrotreated light naphthenic	Inhalation-Dust/Mist (4 hours)	Rat	LC50 2.2 mg/l
Distillates (petroleum), hydrotreated light naphthenic	Ingestion	Rat	LD50 > 5,000 mg/kg
butane	Inhalation-Gas (4 hours)	Rat	LC50 277,000 ppm
2-butoxyethanol	Dermal	Guinea pig	LD50 > 2,000 mg/kg
2-butoxyethanol	Inhalation-Vapour (4 hours)	Guinea pig	LC50 > 2.6 mg/l
2-butoxyethanol	Ingestion	Guinea pig	LD50 1,200 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Distillates (petroleum), hydro- treated light	Rabbit	Mild irritant
isobutane	Professional judgement	No significant irritation
propane	Rabbit	Minimal irritation
Distillates (petroleum), hydrotreated light naphthenic	Rabbit	Mild irritant
butane	Professional judgement	No significant irritation
2-butoxyethanol	Rabbit	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
Distillates (petroleum), hydro- treated light	Rabbit	Mild irritant
isobutane	Professional judgement	No significant irritation
propane	Rabbit	Mild irritant
Distillates (petroleum), hydrotreated light naphthenic	Rabbit	Mild irritant
butane	Rabbit	No significant irritation
2-butoxyethanol	Rabbit	Severe irritant

Skin Sensitisation

Name	Species	Value
Distillates (petroleum), hydro- treated light	Guinea pig	Not classified
Distillates (petroleum), hydrotreated light naphthenic	Guinea pig	Not classified
2-butoxyethanol	Guinea	Not classified

	pig	

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
Distillates (petroleum), hydro- treated light	In Vitro	Not mutagenic
isobutane	In Vitro	Not mutagenic
propane	In Vitro	Not mutagenic
Distillates (petroleum), hydrotreated light naphthenic	In Vitro	Some positive data exist, but the data are not sufficient for classification
Distillates (petroleum), hydrotreated light naphthenic	In vivo	Some positive data exist, but the data are not sufficient for classification
butane	In Vitro	Not mutagenic
2-butoxyethanol	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Distillates (petroleum), hydro- treated light	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Distillates (petroleum), hydrotreated light naphthenic	Dermal	Mouse	Not carcinogenic
2-butoxyethanol	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Distillates (petroleum), hydrotreated light naphthenic	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
Distillates (petroleum), hydrotreated light naphthenic	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
Distillates (petroleum), hydrotreated light naphthenic	Dermal	Not classified for development	Rat	NOAEL 2,000 mg/kg/day	during gestation
Distillates (petroleum), hydrotreated light naphthenic	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
Distillates (petroleum), hydrotreated light naphthenic	Dermal	Not classified for male reproduction	Rabbit	NOAEL 1,000 mg/kg/day	28 days
2-butoxyethanol	Dermal	Not classified for development	Rat	NOAEL 1,760 mg/kg/day	during gestation
2-butoxyethanol	Ingestion	Not classified for development	Rat	NOAEL 100 mg/kg/day	during organogenesis
2-butoxyethanol	Inhalation	Not classified for development	Multiple animal species	NOAEL 0.48 mg/l	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Distillates (petroleum),	Inhalation	central nervous	May cause drowsiness or	Human	NOAEL Not	

hydro- treated light		system depression	dizziness	and animal	available	
Distillates (petroleum), hydro- treated light	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Distillates (petroleum), hydro- treated light	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
isobutane	Inhalation	cardiac sensitisation	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	Not classified	Mouse	NOAEL Not available	
propane	Inhalation	cardiac sensitisation	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	Not classified	Human	NOAEL Not available	
butane	Inhalation	cardiac sensitisation	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	Not classified	Dog	NOAEL 5,000 ppm	25 minutes
butane	Inhalation	respiratory irritation	Not classified	Rabbit	NOAEL Not available	
2-butoxyethanol	Dermal	endocrine system	Not classified	Rabbit	NOAEL 902 mg/kg	6 hours
2-butoxyethanol	Dermal	liver	Not classified	Rabbit	LOAEL 72 mg/kg	not available
2-butoxyethanol	Dermal	kidney and/or bladder	Not classified	Rabbit	LOAEL 451 mg/kg	6 hours
2-butoxyethanol	Dermal	blood	Not classified	Multiple animal species	NOAEL Not available	
2-butoxyethanol	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
2-butoxyethanol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
2-butoxyethanol	Inhalation	blood	Not classified	Multiple animal species	NOAEL Not available	
2-butoxyethanol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
2-butoxyethanol	Ingestion	blood	Not classified	Multiple animal species	NOAEL Not available	
2-butoxyethanol	Ingestion	kidney and/or bladder	Not classified	Human	NOAEL Not available	poisoning and/or abuse

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
isobutane	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 4,500 ppm	13 weeks
butane	Inhalation	kidney and/or bladder | blood	Not classified	Rat	NOAEL 4,489 ppm	90 days
2-butoxyethanol	Dermal	blood	Not classified	Multiple	NOAEL Not	not available

				animal species	available	
2-butoxyethanol	Dermal	endocrine system	Not classified	Rabbit	NOAEL 150 mg/kg/day	90 days
2-butoxyethanol	Inhalation	liver	Not classified	Rat	NOAEL 2.4 mg/l	14 weeks
2-butoxyethanol	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 0.15 mg/l	14 weeks
2-butoxyethanol	Inhalation	blood	Not classified	Rat	LOAEL 0.15 mg/l	6 months
2-butoxyethanol	Inhalation	endocrine system	Not classified	Dog	LOAEL 1.9 mg/l	8 days
2-butoxyethanol	Ingestion	blood	Not classified	Rat	LOAEL 69 mg/kg/day	13 weeks
2-butoxyethanol	Ingestion	kidney and/or bladder	Not classified	Multiple animal species	NOAEL Not available	not available

Aspiration Hazard

Name	Value
Distillates (petroleum), hydro- treated light	Aspiration hazard
Distillates (petroleum), hydrotreated light naphthenic	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.

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

No product test data available.

Material	CAS #	Organism	Type	Exposure	Test endpoint	Test result
Distillates (petroleum), hydro-treated light	64742-47-8	Green algae	Estimated	72 hours	EC50	1 mg/l
Distillates (petroleum), hydro-treated light	64742-47-8	Rainbow trout	Estimated	96 hours	LL50	2 mg/l
Distillates (petroleum), hydro-treated light	64742-47-8	Water flea	Estimated	48 hours	EL50	1.4 mg/l
Distillates (petroleum), hydro-treated light	64742-47-8	Green algae	Estimated	72 hours	NOEL	1 mg/l
Distillates (petroleum), hydro-treated light	64742-47-8	Water flea	Estimated	21 days	NOEL	0.48 mg/l
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	Green algae	Analogous Compound	96 hours	ErC50	>100 mg/l
Distillates (petroleum),	64742-53-6	Water flea	Experimental	48 hours	EC50	>100 mg/l

hydrotreated light naphthenic						
isobutane	75-28-5	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
propane	74-98-6	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
butane	106-97-8	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
2-butoxyethanol	111-76-2	Activated sludge	Experimental	16 hours	IC50	>1,000 mg/l
2-butoxyethanol	111-76-2	Eastern oyster	Experimental	96 hours	LC50	89.4 mg/l
2-butoxyethanol	111-76-2	Green algae	Experimental	72 hours	ErC50	1,840 mg/l
2-butoxyethanol	111-76-2	Rainbow trout	Experimental	96 hours	LC50	1,474 mg/l
2-butoxyethanol	111-76-2	Water flea	Experimental	48 hours	EC50	1,550 mg/l
2-butoxyethanol	111-76-2	Green algae	Experimental	72 hours	ErC10	679 mg/l
2-butoxyethanol	111-76-2	Water flea	Experimental	21 days	NOEC	100 mg/l
Molybdenum disulphide	1317-33-5	N/A	Data not available or insufficient for classification	N/A	N/A	N/A

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Distillates (petroleum), hydro-treated light	64742-47-8	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	Experimental Biodegradation	28 days	BOD	42 %BOD/ThOD	OECD 301F - Manometric respirometry
isobutane	75-28-5	Experimental Photolysis		Photolytic half-life (in air)	13.4 days (t 1/2)	
propane	74-98-6	Experimental Photolysis		Photolytic half-life (in air)	27.5 days (t 1/2)	
butane	106-97-8	Experimental Photolysis		Photolytic half-life (in air)	12.3 days (t 1/2)	
2-butoxyethanol	111-76-2	Experimental Biodegradation	28 days	CO2 evolution	90.4 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2
2-butoxyethanol	111-76-2	Experimental Biodegradation	28 days	Dissolv. Organic Carbon Deplet	100 %removal of DOC	OECD 302B Zahn-Wellens/EVPA
Molybdenum disulphide	1317-33-5	Data not availbl-insufficient	N/A	N/A	N/A	N/A

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Distillates (petroleum), hydro-treated light	64742-47-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	Modeled Bioconcentration		Log Kow	5.07	
isobutane	75-28-5	Experimental Bioconcentration		Log Kow	2.76	

propane	74-98-6	Experimental Bioconcentration		Log Kow	2.36	
butane	106-97-8	Experimental Bioconcentration		Log Kow	2.89	
2-butoxyethanol	111-76-2	Experimental Bioconcentration		Log Kow	0.81	
Molybdenum disulphide	1317-33-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
2-butoxyethanol	111-76-2	Estimated Mobility in Soil	Koc	67 l/kg	

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

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.

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. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

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)
070604* Other organic solvents, washing liquids and mother liquors
16 05 04* Gases in pressure containers (including halons) containing dangerous substances

EU waste code (product container after use)
15 01 04 Metallic packaging

SECTION 14: Transportation information

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number	UN1950	UN1950	UN1950
14.2 UN proper shipping name	AEROSOLS	AEROSOLS, FLAMMABLE	AEROSOLS(HYDROTREATED LIGHT PETROLEUM

			DISTILLATES)
14.3 Transport hazard class(es)	2.1	2.1	2.1
14.4 Packing group	Not applicable.	Not applicable.	Not applicable.
14.5 Environmental hazards	Environmentally Hazardous	Not applicable	Marine Pollutant
14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the 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	5F	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

Carcinogenicity

Ingredient	CAS Nbr	Classification	Regulation
2-butoxyethanol	111-76-2	Gr. 3: Not classifiable	International Agency for Research on Cancer

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

Dangerous Substances	Identifier(s)	Qualifying quantity (tonnes) for the application of

		Lower-tier requirements	Upper-tier requirements
2-butoxyethanol	111-76-2	50	200
butane	106-97-8	10	50
isobutane	75-28-5	10	50
propane	74-98-6	10	50

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

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H226	Flammable liquid and vapour.
H229	Pressurised container: may burst if heated.
H280	Contains gas under pressure; may explode if heated.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Revision information:
GB Section 02: CLP Ingredient table information was added.
GB Section 02: CLP Remark(phrase) information was added.
GB Section 02: Other hazards phrase information was added.
GB Section 04: Information on toxicological effects information was added.
GB Section 12: Classification Warning information was added.
GB Section 15: Carcinogenicity information information was added.
GB Section 15: Chemical Safety Assessment information was added.
GB Section 15: Label remarks and EU Detergent information was added.
GBSDS Section 14 Transport in bulk - Main Heading information was added.
GBSDS Section 14 UN Number information was added.
CLP: Ingredient table information was deleted.
CLP Remark(phrase) information was deleted.
Label: CLP Percent Unknown information was deleted.
Section 02: Label Elements: GB Percent Unknown information was added.
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: Information on toxicological effects information was deleted.
Section 9: Vapour density value 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: Classification Warning information was deleted.
Section 12: Component ecotoxicity information information was modified.
Prints No Data if Adverse effects information is not present 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 12: Persistence and Degradability information information was modified.
Section 12:Bioccumulative potential information information was modified.
Section 14 Other Dangerous Goods – Regulation Data information was modified.
Section 14 Proper Shipping Name 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: Carcinogenicity information information was deleted.
Section 15: Chemical Safety Assessment information was deleted.
Section 15: Label remarks and EU Detergent information was deleted.
Section 15: Seveso Substance Text information was added.
Section 15: Seveso Substance Text 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.

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For Northern Ireland documents, please contact your 3M representative to obtain a copy.