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
Scotchgard™ Fabric & Upholstery Cleaner (Cat. No. 1014R, 1016R-PDQ, 1014R-6WM)

Product Identification Numbers
70-0051-0369-5

7000047817

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

Identified uses
Fabric and upholstery cleaner

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 3 - Aerosol 3; H229

For full text of H phrases, see Section 16.

2.2. Label elements
CLP REGULATION (EC) No 1272/2008

SIGNAL WORD
WARNING.

HAZARD STATEMENTS:

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.
P251	Do not pierce or burn, even after use.

Storage:

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

1% of the mixture consists of components of unknown acute oral toxicity.

Contains 5% of components with unknown hazards to the aquatic environment.

Notes on labelling
Updated per Regulation (EC) No. 648/2004 on detergents.
Ingredients required per 648/2004: <5%: Anionic surfactants, Nonionic surfactant, polycarboxylate. Contains: Perfumes.
4% by mass of the contents are flammable.
Nota K applied to CASRN 68476-86-8.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EC No.	REACH Registration No.	% by Wt	Classification
Non-Hazardous Ingredients	Mixture			85 - 90	Substance not classified as hazardous
Petroleum Gases, Liquified, Sweetened	68476-86-8	270-705-8		3 - 7	Flam. Gas 1, H220; Liquified gas, H280 - Nota K,S,U STOT SE 3, H336
Organic acid ester salt	Trade Secret			1 - 5	Substance not classified as hazardous
Styrene maleic anhydride copolymer	52720-34-0			1 - 5	Substance not classified as hazardous
Sodium Lauryl Sulfate	151-21-3	205-788-1		1 - 5	Aquatic Chronic 3, H412 Acute Tox. 3, H311; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Dam. 1, H318; STOT SE 3, H335
1,1-Difluoroethane	75-37-6	200-866-1		1 - 3	Flam. Gas 1, H220; Liquified gas, H280; STOT SE 3, H336
2-Butoxyethanol	111-76-2	203-905-0	01-	< 0.5	Acute Tox. 4, H332; Acute

			2119475108-36		Tox. 4, H312; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319
Ammonia, aqueous solution	1336-21-6	215-647-6		< 0.25	Skin Corr. 1B, H314; STOT SE 3, H335; Aquatic Acute 1, H400,M=1 - Nota B Met. Corr. 1, H290
Sodium nitrite	7632-00-0	231-555-9		< 0.2	Ox. Sol. 3, H272; Acute Tox. 3, H301; Aquatic Acute 1, H400,M=1
Dodecyldimethylamine oxide	1643-20-5	216-700-6		< 0.2	Aquatic Acute 1, H400,M=1; Aquatic Chronic 1, H410,M=1
Morpholine	110-91-8	203-815-1		< 0.2	Flam. Liq. 3, H226; Acute Tox. 3, H311; Acute Tox. 4, H332; Acute Tox. 4, H302; Skin Corr. 1B, H314
Zinc oxide	1314-13-2	215-222-5		< 0.05	Aquatic Acute 1, H400,M=1; Aquatic Chronic 1, H410,M=1

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
Wash with soap and water. If signs/symptoms develop, get medical attention.

Eye contact
Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

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

4.2. Most important symptoms and effects, both acute and delayed
See Section 11.1 Information on toxicological effects

4.3. Indication of any immediate medical attention and special treatment required
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.
Hydrogen Fluoride	During combustion.
Oxides of sulphur.	During combustion.
Toxic vapour, gas, particulate.	During combustion.

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. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

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 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

Avoid inhalation of thermal decomposition products. 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.

7.2. Conditions for safe storage including any incompatibilities

Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Store away from heat.

7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits
If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Morpholine	110-91-8	UK HSC	TWA: 36 mg/m³ (10 ppm); STEL: 72 mg/m³ (20 ppm)	SKIN
2-Butoxyethanol	111-76-2	UK HSC	TWA:123 mg/m3(25 ppm);STEL:246 mg/m3(50 ppm)	SKIN
Ammonia released from ammonium hydroxide/aqueous ammonia solutions	1336-21-6	UK HSC	TWA:18 mg/m3(25 ppm);STEL:25 mg/m3(35 ppm)	

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
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.

Applicable Norms/Standards
Use eye 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.
Gloves made from the following material(s) are recommended:

Material	Thickness (mm)	Breakthrough Time
Butyl rubber.	0.5	> 8 hours
Neoprene.	0.5	> 8 hours
Nitrile rubber.	0.35	> 8 hours

The glove data presented are based on the substance driving dermal toxicity and the conditions present at the time of testing. Breakthrough time may be altered when the glove is subjected to use conditions that place additional stress on the glove.

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 and particulates
Half facepiece or full facepiece supplied-air respirator

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 types A & P

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Aerosol
Appearance/Odour	Liquid mixture in aerosol container, dispenses white foam with floral scent.
Odour threshold	*No data available.*
pH	9.2
Boiling point/boiling range	100 ºC [*Details:*(Liquid product)]
Melting point	*Not applicable.*
Flammability (solid, gas)	Not applicable.
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	No flash point
Autoignition temperature	*Not applicable.*
Flammable Limits(LEL)	*Not applicable.*
Flammable Limits(UEL)	*Not applicable.*
Vapour pressure	2,399.8 Pa [@ 20 ºC] [*Details:*(Liquid product)]
Relative density	1 [*Ref Std:*WATER=1] [*Details:*(Liquid product)]
Water solubility	Complete
Solubility- non-water	*No data available.*
Partition coefficient: n-octanol/water	*No data available.*
Evaporation rate	*Not applicable.*
Vapour density	*Not applicable.*
Decomposition temperature	*No data available.*
Viscosity	*No data available.*
Density	1 g/ml [*Details:*(Liquid product)]

9.2. Other information

EU Volatile Organic Compounds	*No data available.*
Percent volatile	approximately 94 %

SECTION 10: Stability and reactivity

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

10.2 Chemical stability
Stable.

10.3 Possibility of hazardous reactions
Hazardous polymerisation will not occur.

10.4 Conditions to avoid
Heat.

10.5 Incompatible materials
None known.

10.6 Hazardous decomposition products

Substance	Condition
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

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

SECTION 11: Toxicological information

The information below may not agree with the 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
Intentional concentration and inhalation may be harmful or 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
Mild Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, and dryness.

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

Ingestion
No known health effects.

Additional Health Effects:

Single exposure may cause target organ effects:
Single exposure, above recommended guidelines, may cause:

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	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation-Dust/Mist(4 hr)		No data available; calculated ATE >12.5 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Petroleum Gases, Liquified, Sweetened	Inhalation-Gas (4 hours)	Rat	LC50 277,000 ppm
Styrene maleic anhydride copolymer	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg
Styrene maleic anhydride copolymer	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Sodium Lauryl Sulfate	Inhalation-Dust/Mist		LC50 > 0.975 mg/l
Sodium Lauryl Sulfate	Dermal	Rabbit	LD50 580 mg/kg
Sodium Lauryl Sulfate	Ingestion	Rat	LD50 1,650 mg/kg
1,1-Difluoroethane	Inhalation-Gas (4 hours)	Rat	LC50 > 437,000 ppm
1,1-Difluoroethane	Ingestion	Rat	LD50 > 1,500 mg/kg
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 1,414 mg/kg
Ammonia, aqueous solution	Ingestion	Rat	LD50 350 mg/kg
Morpholine	Dermal	Rabbit	LD50 310 mg/kg
Morpholine	Inhalation-Vapour	Rat	LC50 estimated to be 10 - 20 mg/l
Morpholine	Ingestion	Rat	LD50 1,050 mg/kg
Dodecyldimethylamine oxide	Ingestion	Mouse	LD50 2,700 mg/kg
Dodecyldimethylamine oxide	Dermal	Rabbit	LD50 3,536 mg/kg
Zinc oxide	Dermal		LD50 estimated to be > 5,000 mg/kg
Zinc oxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.7 mg/l
Zinc oxide	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Petroleum Gases, Liquified, Sweetened	Professional judgement	No significant irritation
Sodium Lauryl Sulfate	Rabbit	Irritant
2-Butoxyethanol	Rabbit	Irritant
Ammonia, aqueous solution	Rabbit	Corrosive
Morpholine	official classification	Corrosive

Zinc oxide	Human and animal	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Petroleum Gases, Liquified, Sweetened	Professional judgement	No significant irritation
Sodium Lauryl Sulfate	Rabbit	Corrosive
2-Butoxyethanol	Rabbit	Severe irritant
Ammonia, aqueous solution	Rabbit	Corrosive
Morpholine	Rabbit	Corrosive
Zinc oxide	Rabbit	Mild irritant

Skin Sensitisation

Name	Species	Value
2-Butoxyethanol	Guinea pig	Not classified
Morpholine	Guinea pig	Not classified
Zinc oxide	Guinea pig	Not classified

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
Petroleum Gases, Liquified, Sweetened	In Vitro	Not mutagenic
1,1-Difluoroethane	In Vitro	Some positive data exist, but the data are not sufficient for classification
1,1-Difluoroethane	In vivo	Some positive data exist, but the data are not sufficient for classification
2-Butoxyethanol	In Vitro	Some positive data exist, but the data are not sufficient for classification
Morpholine	In Vitro	Some positive data exist, but the data are not sufficient for classification
Morpholine	In vivo	Some positive data exist, but the data are not sufficient for classification
Zinc oxide	In Vitro	Some positive data exist, but the data are not sufficient for classification
Zinc oxide	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
1,1-Difluoroethane	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
2-Butoxyethanol	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Morpholine	Ingestion	Multiple animal species	Not carcinogenic
Morpholine	Inhalation	Rat	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
1,1-Difluoroethane	Inhalation	Not classified for development	Rat	NOAEL 50,000 ppm	during organogenesis
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
Zinc oxide	Ingestion	Not classified for reproduction and/or development	Multiple animal species	NOAEL 125 mg/kg/day	premating & during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Petroleum Gases, Liquified, Sweetened	Inhalation	cardiac sensitisation	Causes damage to organs	similar compounds	NOAEL Not available	
Petroleum Gases, Liquified, Sweetened	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
Petroleum Gases, Liquified, Sweetened	Inhalation	respiratory irritation	Not classified		NOAEL Not available	
Sodium Lauryl Sulfate	Inhalation	respiratory irritation	May cause respiratory irritation	similar health hazards	NOAEL Not available	
1,1-Difluoroethane	Inhalation	cardiac sensitisation	Causes damage to organs	Human and animal	NOAEL Not available	poisoning and/or abuse
1,1-Difluoroethane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL 100,000 ppm	
1,1-Difluoroethane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Not available	NOAEL Not available	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

Ammonia, aqueous solution	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL not available	
Morpholine	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Petroleum Gases, Liquified, Sweetened	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL Not available	
1,1-Difluoroethane	Inhalation	hematopoietic system | kidney and/or bladder | respiratory system	Not classified	Rat	NOAEL 25,000 ppm	2 years
2-Butoxyethanol	Dermal	blood	Not classified	Multiple animal species	NOAEL Not available	not 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
Morpholine	Dermal	liver | kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Guinea pig	LOAEL 900 mg/kg/day	13 days
Morpholine	Dermal	hematopoietic system	Not classified	Guinea pig	NOAEL 900 mg/kg/day	13 days
Morpholine	Inhalation	eyes	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Morpholine	Inhalation	respiratory system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 0.09 mg/l	13 weeks
Morpholine	Inhalation	liver | kidney and/or bladder	Not classified	Rat	LOAEL 64 mg/l	5 days
Morpholine	Inhalation	heart | endocrine system	Not classified	Rat	NOAEL 0.9 mg/l	13 weeks
Morpholine	Inhalation	nervous system	Not classified	Rat	NOAEL 0.53 mg/l	104 weeks
Morpholine	Ingestion	kidney and/or bladder	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 160 mg/kg/day	30 days
Morpholine	Ingestion	liver | respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 160 mg/kg/day	30 days
Morpholine	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 800 mg/kg/day	30 days
Morpholine	Ingestion	endocrine system	Not classified	Rat	NOAEL 323 mg/kg/day	4 weeks
Zinc oxide	Ingestion	nervous system	Not classified	Rat	NOAEL 600 mg/kg/day	10 days
Zinc oxide	Ingestion	endocrine system | hematopoietic system | kidney and/or bladder	Not classified	Other	NOAEL 500 mg/kg/day	6 months

Aspiration Hazard

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

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

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
Petroleum Gases, Liquified, Sweetened	68476-86-8		Data not available or insufficient for classification			
Organic acid ester salt	Trade Secret		Data not available or insufficient for classification			
Sodium Lauryl Sulfate	151-21-3	Fish other	Experimental	96 hours	LC50	0.59 mg/l
Sodium Lauryl Sulfate	151-21-3	Water flea	Experimental	48 hours	LC50	1.4 mg/l
Sodium Lauryl Sulfate	151-21-3	Atlantic Silverside	Experimental	96 hours	LC50	2.8 mg/l
Sodium Lauryl Sulfate	151-21-3	Crustacea other	Experimental	48 hours	LC50	1.9 mg/l
Sodium Lauryl Sulfate	151-21-3	Algae or other aquatic plants	Experimental	96 hours	EC50	30.2 mg/l
Sodium Lauryl Sulfate	151-21-3	Green algae	Experimental	96 hours	EC50	117 mg/l
Sodium Lauryl Sulfate	151-21-3	Fathead minnow	Experimental	42 days	NOEC	1.357 mg/l
Sodium Lauryl Sulfate	151-21-3	Green Algae	Experimental	96 hours	Effect Concentration 10%	12 mg/l
Sodium Lauryl Sulfate	151-21-3	Water flea	Experimental	7 days	NOEC	0.88 mg/l
Styrene maleic anhydride copolymer	52720-34-0		Data not available or insufficient for classification			
1,1-Difluoroethane	75-37-6	Rainbow trout	Estimated	96 hours	LC50	291.31 mg/l
1,1-Difluoroethane	75-37-6	Water flea	Estimated	48 hours	EC50	634.41 mg/l
2-Butoxyethanol	111-76-2	Rainbow trout	Experimental	96 hours	LC50	1,474 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	EC50	1,840 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	Effect Concentration 10%	679 mg/l
2-Butoxyethanol	111-76-2	Water flea	Experimental	21 days	NOEC	100 mg/l
Ammonia, aqueous solution	1336-21-6	Fish other	Estimated	96 hours	LC50	3.5 mg/l

Ammonia, aqueous solution	1336-21-6	Algae or other aquatic plants	Estimated	72 hours	IC50	21.5 mg/l
Ammonia, aqueous solution	1336-21-6	Grass Shrimp	Estimated	48 hours	EC50	20 mg/l
Ammonia, aqueous solution	1336-21-6	Bluegill	Estimated	32 days	NOEC	4.1 mg/l
Ammonia, aqueous solution	1336-21-6	Algae or other aquatic plants	Estimated	72 hours	NOEC	1.5 mg/l
Ammonia, aqueous solution	1336-21-6	Water flea	Estimated	21 days	NOEC	49.2 mg/l
Dodecyldimethylamine oxide	1643-20-5	Green algae	Experimental	72 hours	EC50	0.11 mg/l
Dodecyldimethylamine oxide	1643-20-5	Water flea	Experimental	48 hours	EC50	2.2 mg/l
Dodecyldimethylamine oxide	1643-20-5	Ricefish	Experimental	96 hours	LC50	30 mg/l
Dodecyldimethylamine oxide	1643-20-5	Fathead minnow	Experimental	302 days	NOEC	0.42 mg/l
Dodecyldimethylamine oxide	1643-20-5	Green algae	Experimental	72 hours	NOEC	0.0049 mg/l
Dodecyldimethylamine oxide	1643-20-5	Water flea	Experimental	21 days	NOEC	0.36 mg/l
Morpholine	110-91-8	Green algae	Experimental	96 hours	EC50	28 mg/l
Morpholine	110-91-8	Rainbow trout	Experimental	96 hours	LC50	180 mg/l
Morpholine	110-91-8	Water flea	Experimental	48 hours	EC50	45 mg/l
Morpholine	110-91-8	Fish other	Experimental	96 hours	LC50	100 mg/l
Morpholine	110-91-8	Water flea	Experimental	21 days	NOEC	5 mg/l
Morpholine	110-91-8	Green algae	Experimental	96 hours	NOEC	10 mg/l
Sodium nitrite	7632-00-0	Rainbow trout	Experimental	96 hours	LC50	0.9 mg/l
Sodium nitrite	7632-00-0	Crustacea other	Experimental	48 hours	LC50	37 mg/l
Sodium nitrite	7632-00-0	Green algae	Experimental	72 hours	EC50	>100 mg/l
Sodium nitrite	7632-00-0	Fathead minnow	Estimated	32 days	NOEC	3.1 mg/l
Zinc oxide	1314-13-2	Rainbow trout	Estimated	96 hours	LC50	0.21 mg/l
Zinc oxide	1314-13-2	Crustacea other	Experimental	24 hours	LC50	0.24 mg/l
Zinc oxide	1314-13-2	Green Algae	Experimental	72 hours	EC50	0.057 mg/l
Zinc oxide	1314-13-2	Rainbow trout	Estimated	30 days	NOEC	0.049 mg/l
Zinc oxide	1314-13-2	Algae or other aquatic plants	Estimated	96 hours	Effect Concentration 10%	0.026 mg/l
Zinc oxide	1314-13-2	Crustacea other	Estimated	24 days	NOEC	0.007 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Petroleum Gases, Liquified, Sweetened	68476-86-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Organic acid ester salt	Trade Secret	Estimated Biodegradation	28 days	BOD	64 % weight	OECD 301C - MITI test (I)
Sodium Lauryl Sulfate	151-21-3	Experimental Biodegradation	28 days	CO2 evolution	95 % weight	OECD 301B - Modified sturm or CO2
Styrene maleic anhydride	52720-34-0	Data not available	N/A	N/A	N/A	N/A

copolymer		or insufficient for classification				
1,1-Difluoroethane	75-37-6	Estimated Biodegradation	28 days	BOD	3 % weight	OECD 301D - Closed bottle test
1,1-Difluoroethane	75-37-6	Estimated Photolysis		Photolytic half-life (in air)	916 days (t 1/2)	Other methods
2-Butoxyethanol	111-76-2	Experimental Biodegradation	28 days	CO2 evolution	90.4 % weight	OECD 301B - Modified sturm or CO2
Ammonia, aqueous solution	1336-21-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Dodecyldimethylamine oxide	1643-20-5	Experimental Biodegradation	28 days	CO2 evolution	95.27 % weight	OECD 301B - Modified sturm or CO2
Morpholine	110-91-8	Experimental Biodegradation	28 days	Dissolv. Organic Carbon Deplet	93 % weight	OECD 301E - Modified OECD Scre
Sodium nitrite	7632-00-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Zinc oxide	1314-13-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Petroleum Gases, Liquified, Sweetened	68476-86-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Organic acid ester salt	Trade Secret	Estimated Bioconcentration		Bioaccumulation factor	2.8	Estimated: Bioconcentration factor
Sodium Lauryl Sulfate	151-21-3	Experimental Bioconcentration		Log Kow	≤-2.03	Other methods
Styrene maleic anhydride copolymer	52720-34-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
1,1-Difluoroethane	75-37-6	Estimated Bioconcentration		Log Kow	1.13	Estimated: Octanol-water partition coefficient
2-Butoxyethanol	111-76-2	Experimental Bioconcentration		Log Kow	0.81	Other methods
Ammonia, aqueous solution	1336-21-6	Estimated Bioconcentration		Log Kow	-1.14	Other methods
Dodecyldimethylamine oxide	1643-20-5	Estimated Bioconcentration		Log Kow	1.85	Other methods
Morpholine	110-91-8	Experimental BCF-Carp	42 days	Bioaccumulation factor	<2.8	OECD 305C-Bioaccum degree fish
Sodium nitrite	7632-00-0	Experimental Bioconcentration		Log Kow	-3.7	Other methods
Zinc oxide	1314-13-2	Experimental BCF-Carp	56 days	Bioaccumulation factor	≤217	OECD 305E - Bioaccumulation flow-through fish test

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

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Facility must be capable of handling aerosol cans. Combustion products will include HF. 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)
20 01 29* Detergents containing dangerous substances

SECTION 14: Transportation information

70-0051-0369-5

ADR/RID: UN1950, AEROSOLS, LIMITED QUANTITY, 2.2, (E), ADR Classification Code: 5A.
IMDG-CODE: UN1950, AEROSOLS, 2.2, IMDG-Code segregation code: NONE, 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

Carcinogenicity

Ingredient	CAS Nbr	Classification	Regulation
2-Butoxyethanol	111-76-2	Gr. 3: Not classifiable	International Agency for Research on Cancer
Morpholine	110-91-8	Gr. 3: Not classifiable	International Agency for Research on Cancer

Global inventory status
Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. The components of this product are in compliance with the chemical notification requirements of TSCA. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory.

15.2. Chemical Safety Assessment
Not applicable

SECTION 16: Other information

List of relevant H statements

H220	Extremely flammable gas.
H226	Flammable liquid and vapour.
H229	Pressurised container. may burst if heated.
H272	May intensify fire; oxidiser.
H280	Contains gas under pressure; may explode if heated.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Revision information:
Section 1: Product name information was modified.
Section 01: SAP Material Numbers information was added.
Section 2: Additional label requirements phrase information was deleted.
Section 2: EU Detergent Regulation label remarks information was deleted.
Section 2: Graphic information information was deleted.
Section 2: Indication of danger information information was deleted.
Label: CLP Classification information was modified.
Label: CLP Environmental Hazard Statements information was deleted.
Label: CLP Percent Unknown information was deleted.
Label: CLP Percent Unknown information was modified.
Label: CLP Precautionary - Disposal information was deleted.
Label: Signal Word information was modified.
Section 2: Label ingredient information information was deleted.
Section 2: Label remarks information was deleted.
Section 2: R phrase reference information was deleted.
Remark (phrase) information was deleted.
Risk phrase information was deleted.
Safety 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 3: Reference to H statement explanation in Section 016 information was added.
Section 3: Reference to R and H statement explanation in Section 16 information was deleted.
Section 3: Reference to section 15 for Nota info information was deleted.
Section 6: Accidental release clean-up information information was modified.
Section 6: Accidental release personal information information was modified.
Section 7: Precautions safe handling information information was modified.
Section 8: Appropriate Engineering controls information information was modified.
Section 8: glove data value information was added.
Section 8: glove data value information was modified.
Section 8: Occupational exposure limit table information was modified.
Section 8: Personal Protection - Respiratory Information information was modified.

Sections 3 and 9: Odour, colour, grade information information was modified.
Section 9: Property description for optional properties information was added.
Section 9: Property description for optional properties information was deleted.
Section 11: Acute Toxicity table information was modified.
Section 11: Germ Cell Mutagenicity Table information was modified.
Section 11: Health Effects - Eye information information was modified.
Section 11: Health Effects - Skin information information was modified.
Section 11: Reproductive Toxicity Table information was modified.
Section 11: Serious Eye Damage/Irritation Table information was modified.
Section 11: Skin Corrosion/Irritation Table information was modified.
Section 11: Skin Sensitization Table information was modified.
Section 11: Target Organs - Repeated Table information was modified.
Section 11: Target Organs - Single Table information was modified.
Section 12: Component ecotoxicity information information was modified.
Section 12: Persistence and Degradability information information was modified.
Section 12:Bioccumulative potential information information was modified.
Section 13: Standard Phrase Category Waste GHS information was modified.
Section 15: Regulations - Inventories information was modified.
Section 16: List of relevant R phrase information information was deleted.
Section 16: List of relevant R-phrases 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 modified.

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