Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the Malaysia Occupational Safety and Health (Chemical Classification, Labelling and Safety Data Sheets) Regulations 2013.

SECTION 1: Identification

1.1. Product identifier
Scotchgard™ Spot Remover and Upholstery Cleaner

Product Identification Numbers
70-0711-6295-5 XN-0021-9828-3 XN-0021-9829-1 XN-0021-9830-9 XN-0021-9831-7
XN-1014-3527-1

1.2. Recommended use and restrictions on use

Recommended use
Carpet Care

1.3. Supplier's details
ADDRESS: 3M Malaysia Sdn. Bhd., Level 8, Block F, Oasis Square, No.2, Jalan PJU 1A/7A, Ara Damansara 47301 Petaling, Jaya, Selangor
Telephone: 03-7884 2888
E Mail: 3mmyehsr@mmm.com
Website: www.3M.com.my

1.4. Emergency telephone number
+60 03-7884 2888

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture
Flammable Aerosol: Category 1.
Gas Under Pressure: Liquefied gas.
Specific Target Organ Toxicity (single exposure): Category 2.

2.2. Label elements
Signal word
Danger

Symbols
Flame | Gas cylinder | Health Hazard |

Pictograms

Hazard Statements

H222	Extremely flammable aerosol.
H280	Contains gas under pressure; may explode if heated.
H371	May cause damage to organs: cardiovascular system |

Precautionary statements

General:

P102	Keep out of reach of children.
P101	If medical advice is needed, have product container or label at hand.

Prevention:

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P273	Avoid release to the environment.

Storage:

P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50C/122F.
P403	Store in a well-ventilated place.
P405	Store locked up.

Disposal:

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

2.3. Other hazards

Intentional misuse by deliberately concentrating and inhaling contents can be harmful or fatal.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt
Water	7732-18-5	60 - 90
Petroleum gases, liquefied, sweetened	68476-86-8	3 - 7
2-Butoxyethanol	111-76-2	1 - 5
Sodium Oleylmethyltauride	137-20-2	0.5 - 1.5
Ethanolamine	141-43-5	0.1 - 1
Sodium Lauryl Sulfate	151-21-3	0.1 - 1
Ammonia	7664-41-7	< 0.5

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 with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. 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
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. Suitable 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. Special protective actions 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 vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors 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.

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 up residue with water. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

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/vapors/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 oxidizing 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 oxidizing agents.

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	C.A.S. No.	Agency	Limit type	Additional Comments
2-Butoxyethanol	111-76-2	ACGIH	TWA:20 ppm	A3: Confirmed animal carcin.
2-Butoxyethanol	111-76-2	Malaysia OELs	TWA(8 hours):96.7 mg/m3(20 ppm)	SKIN
Ethanolamine	141-43-5	ACGIH	TWA:3 ppm;STEL:6 ppm	
Ethanolamine	141-43-5	Malaysia OELs	TWA(8 hours):7.5 mg/m3(3 ppm)	
Ammonia	7664-41-7	ACGIH	TWA:25 ppm;STEL:35 ppm	
Ammonia	7664-41-7	Malaysia OELs	TWA(8 hours):17 mg/m3(25 ppm)	

ACGIH : American Conference of Governmental Industrial Hygienists
CMRG : Chemical Manufacturer's Recommended Guidelines
Malaysia OELs : Malaysia. Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling

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/vapors/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

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: Butyl Rubber
Fluoroelastomer
Polymer laminate

When only incidental contact is anticipated, alternative glove material(s) may be used. If contact with the glove does occur, remove immediately and replace with a set of new gloves. For incidental contact, gloves made of the following material(s) may be used:Nitrile Rubber

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 vapors and particulates
Half facepiece or full facepiece supplied-air respirator
Organic vapor respirators may have short service life.

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 Aerosol
Specific Physical Form:	Aerosol
Color	White
Odor	Not Determined
Odor threshold	*No Data Available*
pH	8.9 - 9.5
Melting point/Freezing point	*Not Applicable*
Boiling point/Initial boiling point/Boiling range	> 100 ºC
Flash Point	No flash point
Evaporation rate	*No Data Available*
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	*No Data Available*
Flammable Limits(UEL)	*No Data Available*
Vapor Pressure	*No Data Available*
Vapor Density and/or Relative Vapor Density	*No Data Available*
Density	*No Data Available*
Relative Density	0.99 - 1.05 [*Ref Std:*WATER=1]
Water solubility	Complete
Solubility- non-water	*No Data Available*
Partition coefficient: n-octanol/ water	*No Data Available*
Autoignition temperature	*No Data Available*
Decomposition temperature	*No Data Available*
Viscosity/Kinematic Viscosity	*No Data Available*
Volatile Organic Compounds	< 7 % weight [*Test Method:*calculated per CARB title 2]
Percent volatile	60 - 100 %
VOC Less H2O & Exempt Solvents	800 - 850 g/l [*Test Method:*calculated per CARB title 2]

Molecular weight	*No Data Available*

Nanoparticles
This material does not contain nanoparticles.

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 polymerization will not occur.

10.4. Conditions to avoid
Heat
Sparks and/or flames

10.5. Incompatible materials
Strong oxidizing agents
Strong acids

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 be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation:
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 localized redness, swelling, itching, and dryness.

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 diarrhea.

Additional Health Effects:

Single exposure may cause target organ effects:
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	Inhalation-Vapor(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Petroleum gases, liquefied, sweetened	Inhalation-Gas (4 hours)	Rat	LC50 277,000 ppm
2-Butoxyethanol	Dermal	Guinea pig	LD50 > 2,000 mg/kg
2-Butoxyethanol	Inhalation-Vapor (4 hours)	Guinea pig	LC50 > 2.6 mg/l
2-Butoxyethanol	Ingestion	Guinea pig	LD50 1,200 mg/kg
Sodium Oleylmethyltauride	Ingestion	Rat	LD50 1,700 mg/kg
Sodium Lauryl Sulfate	Dermal	Rabbit	LD50 580 mg/kg
Sodium Lauryl Sulfate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.975 mg/l
Sodium Lauryl Sulfate	Ingestion	Rat	LD50 1,650 mg/kg
Ethanolamine	Inhalation-Vapor	official classification	LC50 estimated to be 10 - 20 mg/l
Ethanolamine	Dermal	Rabbit	LD50 1,000 mg/kg
Ethanolamine	Ingestion	Rat	LD50 1,720 mg/kg
Ammonia	Inhalation-Gas (4 hours)	Rat	LC50 2,000 ppm

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Petroleum gases, liquefied, sweetened	Professional judgement	No significant irritation
2-Butoxyethanol	Rabbit	Irritant
Sodium Lauryl Sulfate	Rabbit	Irritant
Ethanolamine	Rabbit	Corrosive
Ammonia	Human and animal	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value

Petroleum gases, liquefied, sweetened	Professional judgement	No significant irritation
2-Butoxyethanol	Rabbit	Severe irritant
Sodium Lauryl Sulfate	Rabbit	Corrosive
Ethanolamine	Rabbit	Corrosive
Ammonia	Human and animal	Corrosive

Sensitization:

Skin Sensitization

Name	Species	Value
2-Butoxyethanol	Guinea pig	Not classified
Ethanolamine	Guinea pig	Not classified

Respiratory Sensitization

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

Germ Cell Mutagenicity

Name	Route	Value
Petroleum gases, liquefied, sweetened	In Vitro	Not mutagenic
2-Butoxyethanol	In Vitro	Some positive data exist, but the data are not sufficient for classification
Ethanolamine	In Vitro	Not mutagenic
Ethanolamine	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
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
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
Ethanolamine	Dermal	Not classified for development	Rat	NOAEL 225 mg/kg/day	during organogenesis
Ethanolamine	Ingestion	Not classified for development	Rat	NOAEL 616 mg/kg/day	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration

Petroleum gases, liquefied, sweetened	Inhalation	cardiac sensitization	Causes damage to organs	similar compounds	NOAEL Not available	
Petroleum gases, liquefied, sweetened	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
Petroleum gases, liquefied, sweetened	Inhalation	respiratory irritation	Not classified		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
Sodium Lauryl Sulfate	Inhalation	respiratory irritation	May cause respiratory irritation	similar health hazards	NOAEL Not available	
Ethanolamine	Inhalation	respiratory irritation	May cause respiratory irritation	Human and animal	NOAEL Not available	
Ammonia	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Petroleum gases, liquefied, sweetened	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL Not available	
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
Ethanolamine	Inhalation	liver | kidney and/or bladder | respiratory	Not classified	Multiple animal	NOAEL 0.656 mg/l	5 weeks

		system		species		
Ethanolamine	Ingestion	hematopoietic system | liver | kidney and/or bladder | respiratory system	Not classified	Rat	NOAEL Not available	

Aspiration Hazard
For the component/components, either no data are currently available or the data are 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 be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labeling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

Acute aquatic hazard:
GHS Acute 3: Harmful to aquatic life.

Chronic aquatic hazard:
Not chronically toxic to aquatic life by GHS criteria.

No product test data available

Material	Cas #	Organism	Type	Exposure	Test Endpoint	Test Result
Petroleum gases, liquefied, sweetened	68476-86-8		Data not available or insufficient for classification			n/a
2-Butoxyethanol	111-76-2	Activated sludge	Experimental	16 hours	Inhibitory Concentration 50%	>1,000 mg/l
2-Butoxyethanol	111-76-2	Eastern oyster	Experimental	96 hours	Lethal Concentration 50%	89.4 mg/l
2-Butoxyethanol	111-76-2	Green Algae	Experimental	72 hours	Effect Concentration 50%	1,840 mg/l
2-Butoxyethanol	111-76-2	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	1,474 mg/l
2-Butoxyethanol	111-76-2	Water flea	Experimental	48 hours	Effect Concentration 50%	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	No obs Effect Conc	100 mg/l

Sodium Oleylmethyltauride	137-20-2		Data not available or insufficient for classification			N/A
Ethanolamine	141-43-5	Activated sludge	Experimental	30 minutes	Effect Concentration 10%	>1,000 mg/l
Ethanolamine	141-43-5	Common Carp	Experimental	96 hours	Lethal Concentration 50%	349 mg/l
Ethanolamine	141-43-5	Green Algae	Experimental	72 hours	Effect Concentration 50%	2.5 mg/l
Ethanolamine	141-43-5	Water flea	Experimental	48 hours	Effect Concentration 50%	65 mg/l
Ethanolamine	141-43-5	Green algae	Experimental	72 hours	No obs Effect Conc	1 mg/l
Ethanolamine	141-43-5	Medaka	Experimental	41 days	No obs Effect Conc	1.24 mg/l
Ethanolamine	141-43-5	Water flea	Experimental	21 days	No obs Effect Conc	0.85 mg/l
Sodium Lauryl Sulfate	151-21-3	Activated sludge	Experimental	3 hours	Effect Concentration 50%	135 mg/l
Sodium Lauryl Sulfate	151-21-3	Algae or other aquatic plants	Experimental	96 hours	Effect Concentration 50%	30.2 mg/l
Sodium Lauryl Sulfate	151-21-3	Atlantic Silverside	Experimental	96 hours	Lethal Concentration 50%	2.8 mg/l
Sodium Lauryl Sulfate	151-21-3	Crustecea other	Experimental	48 hours	Lethal Concentration 50%	1.9 mg/l
Sodium Lauryl Sulfate	151-21-3	Fish other	Experimental	96 hours	Lethal Concentration 50%	0.59 mg/l
Sodium Lauryl Sulfate	151-21-3	Green algae	Experimental	96 hours	Effect Concentration 50%	117 mg/l
Sodium Lauryl Sulfate	151-21-3	Water flea	Experimental	48 hours	Lethal Concentration 50%	1.4 mg/l
Sodium Lauryl Sulfate	151-21-3	Fathead Minnow	Experimental	42 days	No obs Effect Conc	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	No obs Effect Conc	0.88 mg/l
Ammonia	7664-41-7	Algae or other aquatic plants	Estimated	72 days	Inhibitory Concentration 50%	10.4 mg/l
Ammonia	7664-41-7	Fish	Estimated	96 hours	Lethal	1.7 mg/l

					Concentration 50%	
Ammonia	7664-41-7	Grass Shrimp	Estimated	48 hours	Effect Concentration 50%	9.69 mg/l
Ammonia	7664-41-7	Algae or other aquatic plants	Estimated	72 hours	No obs Effect Conc	0.73 mg/l
Ammonia	7664-41-7	Bluegill	Estimated	32 days	No obs Effect Conc	1.56 mg/l
Ammonia	7664-41-7	Water flea	Estimated	21 days	No obs Effect Conc	18.6 mg/l

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Petroleum gases, liquefied, sweetened	68476-86-8	Data not availbl-insufficient			N/A	
2-Butoxyethanol	111-76-2	Experimental Biodegradation	28 days	Carbon dioxide evolution	90.4 % weight	OECD 301B - Mod. Sturm or CO2
Sodium Oleylmethyltauride	137-20-2	Experimental Biodegradation	14 days	Biological Oxygen Demand	75 % weight	OECD 301C - MITI (I)
Ethanolamine	141-43-5	Experimental Biodegradation	21 days	Dissolv. Organic Carbon Deplet	>90 % weight	OECD 301A - DOC Die Away Test
Sodium Lauryl Sulfate	151-21-3	Experimental Biodegradation	28 days	Carbon dioxide evolution	95 % weight	OECD 301B - Mod. Sturm or CO2
Ammonia	7664-41-7	Experimental Photolysis		Photolytic half-life (in air)	201 days (t 1/2)	Non-standard method

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Petroleum gases, liquefied, sweetened	68476-86-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Petroleum gases, liquefied, sweetened	68476-86-8	Estimated Bioconcentration		Log of Octanol/H2O part. coeff	2.8	Est: Octanol-water part. coeff
2-Butoxyethanol	111-76-2	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	0.81	Non-standard method
Sodium Oleylmethyltauride	137-20-2	Estimated Bioconcentration		Log of Octanol/H2O part. coeff	1.7	Non-standard method
Ethanolamine	141-43-5	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	-2.3	Non-standard method
Sodium Lauryl Sulfate	151-21-3	Experimental Bioconcentrati		Log of Octanol/H2O	≤-2.03	Non-standard method

		on		part. coeff		
Ammonia	7664-41-7	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	-1.14	Non-standard method

12.4. Mobility in soil
Please contact manufacturer for more details

12.5 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. Disposal methods

According to the Environmental Quality (Scheduled Wastes) Regulations 2005, scheduled waste has to be sent to a prescribed premise for recycling, treatment or disposal. Please approach Kualiti Alam for proper schedule waste classification and disposal.

SECTION 14: Transport Information

Marine Transport (IMDG)

UN Number:UN1950
Proper Shipping Name:AEROSOLS, FLAMMABLE
Technical Name: None assigned.
Hazard Class/Division:2.1
Subsidiary Risk: None assigned.
Packing Group: None assigned.
Limited Quantity: Yes
Marine Pollutant: None assigned.
Marine Pollutant Technical Name: None assigned.
Other Dangerous Goods Descriptions:
None assigned.

Air Transport (IATA)

UN Number:UN1950
Proper Shipping Name:AEROSOLS, FLAMMABLE
Technical Name: None assigned.
Hazard Class/Division:2.1
Subsidiary Risk: None assigned.
Packing Group: None assigned.
Limited Quantity: None assigned.
Marine Pollutant: None assigned.
Marine Pollutant Technical Name: None assigned.
Other Dangerous Goods Descriptions:
None assigned.

Transportation classifications are provided as a customer service. As for shipping, YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M's transportation

classifications are based on product formulation, packaging, 3M policies and 3M's understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling or marking requirements. The above information is only for reference. If you are shipping by air or ocean, YOU are advised to check & meet applicable regulatory requirements.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global inventory status
Contact 3M for more information. The components of this 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 material are in compliance with the provisions of Japan Chemical Substance Control Law. 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.

SECTION 16: Other information

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 Malaysia SDSs are available at www.3M.com.my