



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

Stainless Steel Cleaner & Polish

1.2. Recommended use and restrictions on use

Recommended use

Hard Surface Cleaner

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 1.

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.
 H370 Causes damage to organs: cardiovascular system.

Precautionary statements

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.
 P260 Do not breathe dust/fume/gas/mist/vapors/spray.

Response:

- P307+ P311 IF exposed: Call a POISON CENTER or doctor/physician.

Storage:

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

2.3. Other hazards

Aspiration classification does not apply as this product is sold in sealed, self-pressurized containers with nozzles designed to prevent formation of a stream during usage., 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	40 - 70
White mineral oil (petroleum)	8042-47-5	10 - 30
LIQUEFIED PETROLEUM GAS	68476-85-7	7 - 13
SORBITAN OLEATE	1338-43-8	0.5 - 1.5

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 you feel unwell, get medical attention.

Eye Contact:

No need for first aid is anticipated.

If Swallowed:

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

4.2. Most important symptoms and effects, both acute and delayed

Target organ effects. See Section 11 for additional details.

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

Carbon monoxide
Carbon dioxide
Irritant Vapors or Gases

Condition

During Combustion
During Combustion
During Combustion

5.3. Special protective actions 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 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. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

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

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

Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Protect from sunlight. Store in a well-ventilated place. 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
LIQUEFIED PETROLEUM GAS	68476-85-7	ACGIH	Limit value not established:	simple asphyxiant
LIQUEFIED PETROLEUM GAS	68476-85-7	Malaysia OELs	TWA(8 hours):1800 mg/m3(1000 ppm)	
MINERAL OILS, HIGHLY-REFINED OILS	8042-47-5	ACGIH	TWA(inhalable fraction):5 mg/m3	A4: Not class. as human carcin
OIL MIST, MINERAL	8042-47-5	Malaysia OELs	TWA(as mist)(8 hours):5 mg/m3	

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

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:

Indirect Vented Goggles

Skin/hand protection

No chemical protective gloves are required.

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece supplied-air respirator

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

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state	Liquid
Specific Physical Form:	Aerosol
Color	White
Odor	Lemon
Odor threshold	<i>Not Applicable</i>
pH	9 - 11 Units not avail. or not appl.
Melting point/Freezing point	<i>Not Applicable</i>
Boiling point/Initial boiling point/Boiling range	<i>Not Applicable</i>
Flash Point	-113.9 °C [<i>Test Method:Estimated</i>] [<i>Details:Propellant</i>]
Evaporation rate	<i>Not Applicable</i>
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	<i>Not Applicable</i>
Flammable Limits(UEL)	<i>Not Applicable</i>
Vapor Pressure	<i>Not Applicable</i>
Vapor Density and/or Relative Vapor Density	<i>Not Applicable</i>
Density	0.92 - 0.98 g/cm ³
Relative Density	0.92 - 0.98 [<i>Ref Std:WATER=1</i>]
Water solubility	<i>Not Applicable</i>
Solubility- non-water	<i>Not Applicable</i>
Partition coefficient: n-octanol/ water	<i>Not Applicable</i>
Autoignition temperature	<i>Not Applicable</i>
Decomposition temperature	<i>Not Applicable</i>
Viscosity/Kinematic Viscosity	1,400 - 4,500 mPa-s
Volatile Organic Compounds	<i>No Data Available</i>
Percent volatile	<i>No Data Available</i>
VOC Less H₂O & Exempt Solvents	<i>No Data Available</i>
Kinematic Viscosity	<i>Not Applicable</i>

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

Direct sunlight

Heat

High shear and high temperature conditions

Sparks and/or flames

10.5. Incompatible materials

Reducing agents

Strong oxidizing agents

10.6. Hazardous decomposition products**Substance**

None known.

Condition

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:

Sprayed material may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

Skin Contact:

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

Eye Contact:

Sprayed material may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

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:**

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-Vapor(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
White mineral oil (petroleum)	Dermal	Rabbit	LD50 > 2,000 mg/kg
White mineral oil (petroleum)	Ingestion	Rat	LD50 > 5,000 mg/kg
LIQUEFIED PETROLEUM GAS	Inhalation-	Rat	LC50 227,000 ppm

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	Gas (4 hours)		
SORBITAN OLEATE	Dermal		LD50 estimated to be > 5,000 mg/kg
SORBITAN OLEATE	Ingestion	Rat	LD50 > 39,800 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
White mineral oil (petroleum)	Rabbit	No significant irritation
LIQUEFIED PETROLEUM GAS	Professional judgement	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
White mineral oil (petroleum)	Rabbit	Mild irritant
LIQUEFIED PETROLEUM GAS	Professional judgement	No significant irritation

Sensitization:**Skin Sensitization**

Name	Species	Value
White mineral oil (petroleum)	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
White mineral oil (petroleum)	In Vitro	Not mutagenic
LIQUEFIED PETROLEUM GAS	In Vitro	Not mutagenic

Carcinogenicity

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

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

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

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				mg/kg/day	
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Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
LIQUEFIED PETROLEUM GAS	Inhalation	cardiac sensitization	Causes damage to organs	similar compounds	NOAEL Not available	
LIQUEFIED PETROLEUM GAS	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
LIQUEFIED PETROLEUM GAS	Inhalation	respiratory irritation	Not classified		NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
White mineral oil (petroleum)	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 1,381 mg/kg/day	90 days
White mineral oil (petroleum)	Ingestion	liver immune system	Not classified	Rat	NOAEL 1,336 mg/kg/day	90 days
LIQUEFIED PETROLEUM GAS	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL Not available	

Aspiration Hazard

Name	Value
White mineral oil (petroleum)	Aspiration hazard

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

SECTION 12: Ecological information

The information below may not 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:

Not acutely toxic to aquatic life by GHS criteria.

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
White mineral oil (petroleum)	8042-47-5	Water flea	Estimated	48 hours	EL50	>100 mg/l
White mineral oil (petroleum)	8042-47-5	Bluegill	Experimental	96 hours	LL50	>100 mg/l
White mineral oil (petroleum)	8042-47-5	Green algae	Estimated	72 hours	NOEL	100 mg/l

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White mineral oil (petroleum)	8042-47-5	Water flea	Estimated	21 days	NOEL	>100 mg/l
LIQUEFIED PETROLEUM GAS	68476-85-7		Data not available or insufficient for classification			N/A
SORBITAN OLEATE	1338-43-8	Rainbow Trout	Experimental	96 hours	LC50	>100 mg/l

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
White mineral oil (petroleum)	8042-47-5	Experimental Biodegradation	28 days	Carbon dioxide evolution	0 % weight	OECD 301B - Mod. Sturm or CO2
LIQUEFIED PETROLEUM GAS	68476-85-7	Estimated Photolysis		Photolytic half-life (in air)	21.4 days (t 1/2)	Non-standard method
SORBITAN OLEATE	1338-43-8	Estimated Biodegradation	28 days	Biological Oxygen Demand	68 % weight	OECD 301B - Mod. Sturm or CO2

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
White mineral oil (petroleum)	8042-47-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
LIQUEFIED PETROLEUM GAS	68476-85-7	Estimated Bioconcentration		Log of Octanol/H2O part. coeff	2.8	Non-standard method
SORBITAN OLEATE	1338-43-8	Estimated Bioconcentration		Bioaccumulation Factor	7.8	Est: Bioconcentration factor

12.4. Mobility in soil

Please contact manufacturer for more details

12.5 Other adverse effects

No information available

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:None assigned.

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 Industrial Safety and Health Law. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. 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 in this Safety Data Sheet (SDS) 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 SDS or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own evaluation to satisfy

themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into Malaysia, you are responsible for all applicable regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration/notification.

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