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
3M Perfect-It III 50383 and 51302 Ultrafina SE

Product Identification Numbers
UU-0031-6515-4 UU-0055-4320-0 UU-0055-4321-8 UU-0055-4322-6 UU-0108-8136-3
UU-0109-4379-1 UU-0116-2981-1

1.2. Recommended use and restrictions on use

Recommended use
Automotive, For use with a rotary polishing machine for the removal of swirls and holograms to achieve a high gloss finish.

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
Not classified as hazardous according to Occupational Safety and Health (Chemical Classification, Labelling and Safety Data Sheets) Regulations 2013.

2.2. Label elements
Signal word
Not applicable

Symbols
Not applicable

Pictograms

Not applicable

2.3. Other hazards
Aspiration classification does not apply due to the viscosity of the product.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt
Water	None	40 - 70
DODECAMETHYLCYCLOHEXASILOXANE	540-97-6	7 - 15
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	7 - 15
Aluminum Oxide	1344-28-1	< 7
Solvent dewaxed heavy paraffinic distillate (petroleum)	64742-65-0	< 5
NOT CLASSIFIED OILS	Trade Secret	< 1.5
GLYCERIN	56-81-5	< 1.5
POLY(OXY-1,2-ETHANEDIYL),.ALPHA.-UNDECYL-.OMEGA.-HYDROXY-	34398-01-1	< 0.3

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:
Remove person to fresh air. If you feel unwell, 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
Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media
In case of fire: Use a carbon dioxide or dry chemical extinguisher to extinguish.

5.2. Special hazards arising from the substance or mixture
None inherent in this product.

Hazardous Decomposition or By-Products

Substance	Condition
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

5.3. Special protective actions for fire-fighters
Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, 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. 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. 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
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 detergent and 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
Keep out of reach of children. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities
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
Aluminum Oxide	1344-28-1	Malaysia OELs	TWA (proposed)(8 hours):10 mg/m3	
Aluminum, insoluble compounds	1344-28-1	ACGIH	TWA(respirable fraction):1 mg/m3	A4: Not class. as human carcin
Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles	1344-28-1	ACGIH	TWA(inhalable particulates):10 mg/m3	
Particles (insoluble or poorly soluble) not otherwise specified,	1344-28-1	ACGIH	TWA(respirable particles):3 mg/m3	

respirable particles				
DUST, INERT OR NUISANCE	56-81-5	Malaysia OELs	TWA (proposed)(respirable particles)(8 hours):3 mg/m3;TWA (proposed)(Inhalable particulate)(8 hours):10 mg/m3	
GLYCERIN	56-81-5	Malaysia OELs	TWA(as mist)(8 hours):10 mg/m3	
Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles	56-81-5	ACGIH	TWA(inhalable particulates):10 mg/m3	
Particles (insoluble or poorly soluble) not otherwise specified, respirable particles	56-81-5	ACGIH	TWA(respirable particles):3 mg/m3	
JET FUELS (NON-AEROSOL), AS TOTAL HYDROCARBON VAPOR	64742-47-8	ACGIH	TWA(as total hydrocarbon vapor, non-aerosol):200 mg/m3	A3: Confirmed animal carcin., SKIN
Kerosine (petroleum)	64742-47-8	ACGIH	TWA(as total hydrocarbon vapor, non-aerosol):200 mg/m3	A3: Confirmed animal carcin., SKIN
OIL MIST, MINERAL	64742-65-0	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. Provide appropriate local exhaust ventilation for cutting, grinding, sanding or machining.

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:
Safety Glasses with side shields

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: Polymer laminate

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

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:	Thixotropic liquid
Color	Light Blue
Odor	Solvent
Odor threshold	*No Data Available*
pH	7.5 - 8.5 Units not avail. or not appl. [*Details:*@ 25° C]
Melting point/Freezing point	*Not Applicable*
Boiling point/Initial boiling point/Boiling range	*No Data Available*
Flash Point	>= 110 ºC [*Test Method:*Closed Cup]
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	0.959 - 0.984 g/cm3 [@ 25 ºC]
Relative Density	0.911 - 1.007 [*Ref Std:*WATER=1]
Water solubility	Appreciable
Solubility- non-water	*No Data Available*
Partition coefficient: n-octanol/ water	*No Data Available*
Autoignition temperature	*Not Applicable*
Decomposition temperature	*No Data Available*
Viscosity/Kinematic Viscosity	10,000 mPa-s - 13,000 mPa-s [*Details:*@ 25C (+/- 1 C), RVF No. 4 (T-A) Spindle, @ 10 rpm x 200]
Volatile Organic Compounds	18.51 %
Percent volatile	57.2 %
VOC Less H2O & Exempt Solvents	*No Data Available*

SECTION 10: Stability and reactivity

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

10.2. Chemical stability
Stable.

10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

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

10.5. Incompatible materials
Alkali and alkaline earth metals
Strong acids
Strong oxidizing agents

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.

Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact:
Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Eye Contact:
Dust created by cutting, grinding, sanding, or machining 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.

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
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Inhalation-Vapor	Professional judgement	LC50 estimated to be 20 - 50 mg/l
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Dermal	Rabbit	LD50 > 5,000 mg/kg

DODECAMETHYLCYCLOHEXASILOXANE	Dermal	Rat	LD50 > 2,000 mg/kg
DODECAMETHYLCYCLOHEXASILOXANE	Ingestion	Rat	LD50 > 50,000 mg/kg
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Ingestion	Rat	LD50 > 5,000 mg/kg
Aluminum Oxide	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminum Oxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Aluminum Oxide	Ingestion	Rat	LD50 > 5,000 mg/kg
Solvent dewaxed heavy paraffinic distillate (petroleum)	Dermal	Rabbit	LD50 > 5,000 mg/kg
Solvent dewaxed heavy paraffinic distillate (petroleum)	Ingestion	Rat	LD50 > 5,000 mg/kg
Solvent dewaxed heavy paraffinic distillate (petroleum)	Inhalation-Dust/Mist (4 hours)	similar compounds	LC50 > 4 mg/l
GLYCERIN	Dermal	Rabbit	LD50 estimated to be > 5,000 mg/kg
GLYCERIN	Ingestion	Rat	LD50 > 5,000 mg/kg
POLY(OXY-1,2-ETHANEDIYL),.ALPHA.-UNDECYL-.OMEGA.-HYDROXY-	Dermal	Rabbit	LD50 > 2,000 mg/kg
POLY(OXY-1,2-ETHANEDIYL),.ALPHA.-UNDECYL-.OMEGA.-HYDROXY-	Ingestion	Rat	LD50 > 700 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
DODECAMETHYLCYCLOHEXASILOXANE	Rabbit	No significant irritation
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Rabbit	Mild irritant
Aluminum Oxide	Rabbit	No significant irritation
Solvent dewaxed heavy paraffinic distillate (petroleum)	Rabbit	No significant irritation
GLYCERIN	Rabbit	No significant irritation
POLY(OXY-1,2-ETHANEDIYL),.ALPHA.-UNDECYL-.OMEGA.-HYDROXY-	similar health hazards	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
DODECAMETHYLCYCLOHEXASILOXANE	Rabbit	No significant irritation
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Rabbit	Mild irritant
Aluminum Oxide	Rabbit	No significant irritation
Solvent dewaxed heavy paraffinic distillate (petroleum)	Rabbit	No significant irritation
GLYCERIN	Rabbit	No significant irritation
POLY(OXY-1,2-ETHANEDIYL),.ALPHA.-UNDECYL-.OMEGA.-HYDROXY-	Professional judgement	Corrosive

Sensitization:

Skin Sensitization

Name	Species	Value
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Guinea pig	Not classified
Solvent dewaxed heavy paraffinic distillate (petroleum)	Guinea pig	Not classified
GLYCERIN	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
HYDROTREATED LIGHT PETROLEUM DISTILLATES	In Vitro	Not mutagenic
HYDROTREATED LIGHT PETROLEUM DISTILLATES	In vivo	Not mutagenic
Aluminum Oxide	In Vitro	Not mutagenic
Solvent dewaxed heavy paraffinic distillate (petroleum)	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Not Specified	Not available	Not carcinogenic
Aluminum Oxide	Inhalation	Rat	Not carcinogenic
Solvent dewaxed heavy paraffinic distillate (petroleum)	Dermal	Mouse	Not carcinogenic
GLYCERIN	Ingestion	Mouse	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
DODECAMETHYLCYCLOHEXASILOXANE	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
DODECAMETHYLCYCLOHEXASILOXANE	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	28 days
DODECAMETHYLCYCLOHEXASILOXANE	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Not Specified	Not classified for female reproduction	Rat	NOAEL Not available	1 generation
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Not Specified	Not classified for male reproduction	Rat	NOAEL Not available	1 generation
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Not Specified	Not classified for development	Rat	NOAEL Not available	1 generation
Solvent dewaxed heavy paraffinic distillate (petroleum)	Dermal	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during gestation
GLYCERIN	Ingestion	Not classified for female reproduction	Rat	NOAEL 2,000 mg/kg/day	2 generation
GLYCERIN	Ingestion	Not classified for male reproduction	Rat	NOAEL 2,000 mg/kg/day	2 generation
GLYCERIN	Ingestion	Not classified for development	Rat	NOAEL 2,000 mg/kg/day	2 generation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
POLY(OXY-1,2-ETHANEDIYL),.ALPHA.-UNDECYL-.OMEGA.-HYDROXY-	Inhalation	respiratory irritation	May cause respiratory irritation	similar health hazards	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
DODECAMETHYLCYCLOHEXASILOXANE	Ingestion	endocrine system | liver | respiratory	Not classified	Rat	NOAEL 1,000	28 days

		system | nervous system			mg/kg/day	
Aluminum Oxide	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Aluminum Oxide	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
Solvent dewaxed heavy paraffinic distillate (petroleum)	Dermal	skin | liver | hematopoietic system | kidney and/or bladder	Not classified	Rat	NOAEL 2,000 mg/kg/day	13 weeks
GLYCERIN	Inhalation	respiratory system | heart | liver | kidney and/or bladder	Not classified	Rat	NOAEL 3.91 mg/l	14 days
GLYCERIN	Ingestion	endocrine system | hematopoietic system | liver | kidney and/or bladder	Not classified	Rat	NOAEL 10,000 mg/kg/day	2 years

Aspiration Hazard

Name	Value
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Aspiration hazard
Solvent dewaxed heavy paraffinic distillate (petroleum)	Not an 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:
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
DODECAMETHYLCYCLOHEXASILOXANE	540-97-6	Activated sludge	Experimental	3 hours	EC50	>100 mg/l
DODECAMETHYLCYCLOHEXASILOXANE	540-97-6	Green algae	Experimental	72 hours	EC50	>100 mg/l
DODECAMETHYLCYCLOHEXASILOXANE	540-97-6	Fathead Minnow	Experimental	49 days	NOEC	100 mg/l
DODECAMETHYLCYCLOHEXASILOXANE	540-97-6	Green algae	Experimental	72 hours	NOEC	100 mg/l
DODECAMETHYLCYCLOHEXASILOXANE	540-97-6	Water flea	Experimental	21 days	NOEC	100 mg/l

HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	Green algae	Experimental	72 hours	EL50	>1,000 mg/l
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	Rainbow Trout	Experimental	96 hours	LL50	>1,000 mg/l
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	Water flea	Experimental	48 hours	EL50	>1,000 mg/l
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	Green algae	Experimental	72 hours	NOEL	1,000 mg/l
Aluminum Oxide	1344-28-1	Fish	Experimental	96 hours	LC50	>100 mg/l
Aluminum Oxide	1344-28-1	Green algae	Experimental	72 hours	EC50	>100 mg/l
Aluminum Oxide	1344-28-1	Water flea	Experimental	48 hours	LC50	>100 mg/l
Aluminum Oxide	1344-28-1	Green algae	Experimental	72 hours	NOEC	>100 mg/l
Solvent dewaxed heavy paraffinic distillate (petroleum)	64742-65-0	Green algae	Analogous Compound	96 hours	EC50	>100 mg/l
Solvent dewaxed heavy paraffinic distillate (petroleum)	64742-65-0	Water flea	Analogous Compound	48 hours	EC50	>100 mg/l
Solvent dewaxed heavy paraffinic distillate (petroleum)	64742-65-0	Rainbow Trout	Experimental	96 hours	LC50	>100 mg/l
Solvent dewaxed heavy paraffinic distillate (petroleum)	64742-65-0	Water flea	Experimental	21 days	NOEC	100 mg/l
GLYCERIN	56-81-5	Bacteria	Experimental	16 hours	NOEC	10,000 mg/l
GLYCERIN	56-81-5	Rainbow Trout	Experimental	96 hours	LC50	54,000 mg/l
GLYCERIN	56-81-5	Water flea	Experimental	48 hours	LC50	1,955 mg/l
POLY(OXY-1,2-ETHANEDIYL),.ALPHA.-UNDECYL-.OMEGA.-HYDROXY-	34398-01-1	Green algae	Analogous Compound	72 hours	ErC50	0.43 mg/l
POLY(OXY-1,2-ETHANEDIYL),.ALPHA.-UNDECYL-.OMEGA.-HYDROXY-	34398-01-1	Green algae	Analogous Compound	72 hours	NOEC	0.09 mg/l

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
DODECAMETHYLCYCLOHEXASILOXANE	540-97-6	Experimental Biodegradation	28 days	Carbon dioxide evolution	4.47 %CO2 evolution/THCO2 evolution	OECD 310 CO2 Headspace
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	Estimated Biodegradation	28 days	Biological Oxygen Demand	69 %BOD/ThOD	OECD 301F - Manometric Respiro
Aluminum Oxide	1344-28-1	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Solvent dewaxed	64742-65-0	Experimental	28 days	Carbon dioxide	23 %CO2	similar to OECD 301B

heavy paraffinic distillate (petroleum)		Biodegradation		evolution	evolution/THCO2 evolution	
GLYCERIN	56-81-5	Experimental Biodegradation	14 days	Biological Oxygen Demand	63 %BOD/ThOD	OECD 301C - MITI (I)
POLY(OXY-1,2-ETHANEDIYL),.ALPHA.-UNDECYL-.OMEGA.-HYDROXY-	34398-01-1	Modeled Biodegradation	28 days	Carbon dioxide evolution	95 %CO2 evolution/THCO2 evolution	Catalogic™

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
DODECAMETHYLCYCLOHEXASILOXANE	540-97-6	Experimental BCF - Fish	49 days	Bioaccumulation Factor	1160	OECD305-Bioconcentration
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Aluminum Oxide	1344-28-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Solvent dewaxed heavy paraffinic distillate (petroleum)	64742-65-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
GLYCERIN	56-81-5	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	-1.76	
POLY(OXY-1,2-ETHANEDIYL),.ALPHA.-UNDECYL-.OMEGA.-HYDROXY-	34398-01-1	Modeled Bioconcentration		Bioaccumulation Factor	50	Catalogic™

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

Not hazardous for transportation.

Marine Transport (IMDG)

UN Number: None assigned.
Proper Shipping Name: None assigned.
Technical Name: None assigned.
Hazard Class/Division: None assigned.

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: None assigned.
Proper Shipping Name: None assigned.
Technical Name: None assigned.
Hazard Class/Division: None assigned.
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 product are in compliance with the new substance notification requirements of CEPA. 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