



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™ Ultrafine Machine Polish, PN 06068 06069 06073 06074, 39062

Product Identification Numbers

60-4550-3493-8 60-4550-5231-0 60-4550-5233-6 60-4550-5234-4

1.2. Recommended use and restrictions on use

Recommended use

Automotive

For Industrial or Professional use only

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

Chronic Aquatic Toxicity: Category 3.

2.2. Label elements

Signal word

Not applicable.

Symbols

Not applicable.

Pictograms

Not applicable

Hazard Statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

General:

P102 Keep out of reach of children.
 P103 Read label before use.
 P101 If medical advice is needed, have product container or label at hand.

Disposal:

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

2.3. Other hazards

None known

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt
Water	7732-18-5	40 - 70
Hydrotreated Light Petroleum Distillates	64742-47-8	10 - 30
Dodecamethylcyclohexasiloxane	540-97-6	7 - 15
Aluminum Oxide	1344-28-1	3 - 8
Solvent-Refined Heavy Paraffinic Petroleum Distillates	64741-88-4	1 - 5
Mineral Oil	64741-89-5	< 2
Formaldehyde	50-00-0	< 0.05

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

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

<u>Substance</u>	<u>Condition</u>
Formaldehyde	During Combustion
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

Keep from freezing. 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/m ³	
Aluminum, insoluble compounds	1344-28-1	ACGIH	TWA(respirable fraction):1 mg/m ³	A4: Not class. as human carcin
DUST, INERT OR NUISANCE	1344-28-1	Malaysia OELs	TWA (proposed)(Inhalable particulate)(8 hours):10 mg/m ³ ;TWA (proposed)(respirable particles)(8 hours):3 mg/m ³	
Formaldehyde	50-00-0	ACGIH	TWA:0.1 ppm;STEL:0.3 ppm	A2: Suspected human carcin., Dermal/Respiratory Sensitizer
Formaldehyde	50-00-0	Malaysia OELs	CEIL:0.37 mg/m ³ (0.3 ppm)	
Mineral oils (untreated and mildly treated)	64741-88-4	ACGIH	Limit value not established:	A2: Suspected human carcin., Cntrl all expos- low as possib
MINERAL OILS, HIGHLY-REFINED OILS	64741-88-4	ACGIH	TWA(inhalable fraction):5 mg/m ³	A4: Not class. as human carcin
OIL MIST, MINERAL	64741-88-4	Malaysia OELs	TWA(as mist)(8 hours):5 mg/m ³	
Mineral oils (untreated and mildly treated)	64741-89-5	ACGIH	Limit value not established:	A2: Suspected human carcin., Cntrl all expos- low as possib
MINERAL OILS, HIGHLY-REFINED OILS	64741-89-5	ACGIH	TWA(inhalable fraction):5 mg/m ³	A4: Not class. as human carcin
OIL MIST, MINERAL	64741-89-5	Malaysia OELs	TWA(as mist)(8 hours):5 mg/m ³	
Kerosine (petroleum)	64742-47-8	ACGIH	TWA(as total hydrocarbon vapor, non-aerosol):200 mg/m ³	A3: Confirmed animal carcin., SKIN

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

Provide appropriate local exhaust ventilation for cutting, grinding, sanding or machining. 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:

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.

Gloves made from the following material(s) are recommended: Neoprene

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
Appearance/Odor	Blue liquid. solvent odor
Odor threshold	<i>No Data Available</i>
pH	7.5 - 8.5
Melting point/Freezing point	<i>Not Applicable</i>
Boiling point/Initial boiling point/Boiling range	100 °C
Flash Point	> 110 °C [Test Method:Closed Cup]
Evaporation rate	<i>No Data Available</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	4.5 [Ref Std:AIR=1]
Density	0.911 - 1.007 g/ml
Relative Density	0.911 - 1.007 [Ref Std:WATER=1]
Water solubility	Appreciable
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	<i>Not Applicable</i>
Decomposition temperature	<i>No Data Available</i>
Viscosity	10,000 - 13,000 mPa-s
Molecular weight	<i>No Data Available</i>
Volatile Organic Compounds	1 g/l [Test Method:calculated SCAQMD rule 443.1]
Volatile Organic Compounds	0.1 % weight [Test Method:calculated per CARB title 2]
Percent volatile	74.2 % weight [Test Method:Estimated]
VOC Less H2O & Exempt Solvents	1 g/l [Test Method:calculated SCAQMD rule 443.1]

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

Sparks and/or flames

10.5. Incompatible materials

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.

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	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Hydrotreated Light Petroleum Distillates	Dermal	Rabbit	LD50 > 3,160 mg/kg

Hydrotreated Light Petroleum Distillates	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 3 mg/l
Hydrotreated Light Petroleum Distillates	Ingestion	Rat	LD50 > 5,000 mg/kg
Dodecamethylcyclhexasiloxane	Dermal	Rat	LD50 > 2,000 mg/kg
Dodecamethylcyclhexasiloxane	Ingestion	Rat	LD50 > 50,000 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-Refined Heavy Paraffinic Petroleum Distillates	Dermal	Rabbit	LD50 > 2,000 mg/kg
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Ingestion	Rat	LD50 > 5,000
Mineral Oil	Dermal	Rabbit	LD50 > 5,000 mg/kg
Mineral Oil	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 4 mg/l
Mineral Oil	Ingestion	Rat	LD50 > 5,000 mg/kg
Formaldehyde	Dermal	Rabbit	LD50 270 mg/kg
Formaldehyde	Inhalation-Gas (4 hours)	Rat	LC50 470 ppm
Formaldehyde	Ingestion	Rat	LD50 800 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Hydrotreated Light Petroleum Distillates	Rabbit	Mild irritant
Dodecamethylcyclhexasiloxane	Rabbit	No significant irritation
Aluminum Oxide	Rabbit	No significant irritation
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Rabbit	Minimal irritation
Mineral Oil	Rabbit	Minimal irritation
Formaldehyde	official classification	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
Hydrotreated Light Petroleum Distillates	Rabbit	Mild irritant
Dodecamethylcyclhexasiloxane	Rabbit	No significant irritation
Aluminum Oxide	Rabbit	No significant irritation
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Rabbit	Mild irritant
Mineral Oil	Rabbit	No significant irritation
Formaldehyde	official classification	Corrosive

Skin Sensitization

Name	Species	Value
Hydrotreated Light Petroleum Distillates	Guinea pig	Not classified
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Guinea pig	Not classified
Mineral Oil	Guinea pig	Not classified
Formaldehyde	Guinea pig	Sensitizing

Respiratory Sensitization

Name	Species	Value
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Formaldehyde	Human	Some positive data exist, but the data are not sufficient for classification
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Germ Cell Mutagenicity

Name	Route	Value
Hydrotreated Light Petroleum Distillates	In Vitro	Not mutagenic
Aluminum Oxide	In Vitro	Not mutagenic
Solvent-Refined Heavy Paraffinic Petroleum Distillates	In Vitro	Some positive data exist, but the data are not sufficient for classification
Mineral Oil	In vivo	Not mutagenic
Mineral Oil	In Vitro	Some positive data exist, but the data are not sufficient for classification
Formaldehyde	In Vitro	Some positive data exist, but the data are not sufficient for classification
Formaldehyde	In vivo	Mutagenic

Carcinogenicity

Name	Route	Species	Value
Hydrotreated Light Petroleum Distillates	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Aluminum Oxide	Inhalation	Rat	Not carcinogenic
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Mineral Oil	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Formaldehyde	Not Specified	Human and animal	Carcinogenic

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	prematuring & 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	prematuring & during gestation
Formaldehyde	Ingestion	Not classified for male reproduction	Rat	NOAEL 100 mg/kg	not applicable
Formaldehyde	Inhalation	Not classified for development	Rat	NOAEL 10 ppm	during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Hydrotreated Light Petroleum Distillates	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Hydrotreated Light Petroleum Distillates	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Hydrotreated Light Petroleum Distillates	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	

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Solvent-Refined Heavy Paraffinic Petroleum Distillates	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
Formaldehyde	Inhalation	respiratory system	Causes damage to organs	Rat	LOAEL 128 ppm	6 hours
Formaldehyde	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	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 system nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
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-Refined Heavy Paraffinic Petroleum Distillates	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.21 mg/l	28 days
Mineral Oil	Dermal	hematopoietic system liver kidney and/or bladder	Not classified	Rabbit	NOAEL 5,000 mg/kg/day	3 weeks
Formaldehyde	Dermal	respiratory system	Not classified	Mouse	NOAEL 80 mg/kg/day	60 weeks
Formaldehyde	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	NOAEL 0.3 ppm	28 months
Formaldehyde	Inhalation	liver	Not classified	Rat	NOAEL 20 ppm	13 weeks
Formaldehyde	Inhalation	hematopoietic system	Not classified	Mouse	NOAEL 15 ppm	3 weeks
Formaldehyde	Inhalation	nervous system	Not classified	Mouse	NOAEL 10 ppm	13 weeks
Formaldehyde	Inhalation	endocrine system immune system muscles kidney and/or bladder	Not classified	Rat	NOAEL 15 ppm	28 months
Formaldehyde	Inhalation	gastrointestinal tract	Not classified	Rat	NOAEL 15 ppm	2 years
Formaldehyde	Inhalation	eyes vascular system	Not classified	Rat	NOAEL 14.3 ppm	2 years
Formaldehyde	Inhalation	heart	Not classified	Mouse	NOAEL 14.3 ppm	2 years
Formaldehyde	Ingestion	liver	Not classified	Rat	NOAEL 300 mg/kg/day	2 years
Formaldehyde	Ingestion	immune system	Not classified	Rat	NOAEL 20 mg/kg/day	4 weeks
Formaldehyde	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 15 mg/kg/day	24 months
Formaldehyde	Ingestion	nervous system	Not classified	Rat	NOAEL 109 mg/kg/day	2 years
Formaldehyde	Ingestion	heart endocrine system hematopoietic system respiratory system vascular system	Not classified	Rat	NOAEL 300 mg/kg/day	2 years

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Formaldehyde	Ingestion	skin muscles eyes	Not classified	Rat	NOAEL 109 mg/kg/day	2 years
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Aspiration Hazard

Name	Value
Hydrotreated Light Petroleum Distillates	Aspiration hazard
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Aspiration hazard
Mineral Oil	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:

GHS Chronic 3: Harmful to aquatic life with long lasting effects

No product test data available

Material	Cas #	Organism	Type	Exposure	Test Endpoint	Test Result
Hydrotreated Light Petroleum Distillates	64742-47-8	Green Algae	Estimated	72 hours	Effect Concentration 50%	1 mg/l
Hydrotreated Light Petroleum Distillates	64742-47-8	Rainbow Trout	Estimated	96 hours	Lethal Level 50%	2 mg/l
Hydrotreated Light Petroleum Distillates	64742-47-8	Water flea	Estimated	48 hours	Effect Level 50%	1.4 mg/l
Hydrotreated Light Petroleum Distillates	64742-47-8	Green Algae	Estimated	72 hours	No obs Effect Level	1 mg/l
Hydrotreated Light Petroleum Distillates	64742-47-8	Water flea	Estimated	21 days	No obs Effect Level	0.48 mg/l
Dodecamethylcyclohexasiloxane	540-97-6	Green algae	Experimental	72 hours	Effect Concentration 50%	>100 mg/l
Dodecamethylcyclohexasiloxane	540-97-6	Fathead Minnow	Experimental	49 days	No obs Effect Conc	>100 mg/l

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Dodecamethylcyclohexasiloxane	540-97-6	Green algae	Experimental	72 hours	No obs Effect Conc	>100 mg/l
Dodecamethylcyclohexasiloxane	540-97-6	Water flea	Experimental	21 days	No obs Effect Conc	>100 mg/l
Aluminum Oxide	1344-28-1	Fish	Experimental	96 hours	Lethal Concentration 50%	>100 mg/l
Aluminum Oxide	1344-28-1	Green Algae	Experimental	72 hours	Effect Concentration 50%	>100 mg/l
Aluminum Oxide	1344-28-1	Water flea	Experimental	48 hours	Lethal Concentration 50%	>100 mg/l
Aluminum Oxide	1344-28-1	Green Algae	Experimental	72 hours	No obs Effect Conc	>100 mg/l
Solvent-Refined Heavy Paraffinic Petroleum Distillates	64741-88-4	Fathead Minnow	Estimated	96 hours	Lethal Level 50%	>100 mg/l
Solvent-Refined Heavy Paraffinic Petroleum Distillates	64741-88-4	Water flea	Estimated	48 hours	Effect Concentration 50%	>100 mg/l
Solvent-Refined Heavy Paraffinic Petroleum Distillates	64741-88-4	Green algae	Experimental	96 hours	Effect Level 50%	>100 mg/l
Solvent-Refined Heavy Paraffinic Petroleum Distillates	64741-88-4	Green algae	Experimental	96 hours	No obs Effect Level	100 mg/l
Solvent-Refined Heavy Paraffinic Petroleum Distillates	64741-88-4	Water flea	Experimental	21 days	No obs Effect Level	100 mg/l
Mineral Oil	64741-89-5	Green algae	Experimental	96 hours	Effect Concentration 50%	>100 mg/l
Mineral Oil	64741-89-5	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	>100 mg/l
Formaldehyde	50-00-0	Fish other	Experimental	96 hours	Lethal Concentration 50%	6.7 mg/l
Formaldehyde	50-00-0	Green algae	Experimental	72 hours	Effect Concentration 50%	4.89 mg/l

Formaldehyde	50-00-0	Water flea	Experimental	48 hours	Effect Concentration 50%	5.8 mg/l
Formaldehyde	50-00-0	Ricefish	Experimental	28 days	No obs Effect Conc	>=48 mg/l
Formaldehyde	50-00-0	Water flea	Experimental	21 days	No obs Effect Conc	>=6.4 mg/l

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Hydrotreated Light Petroleum Distillates	64742-47-8	Data not availbl-insufficient			N/A	
Dodecamethylcyclohexasiloxane	540-97-6	Experimental Biodegradation	28 days	Carbon dioxide evolution	4.47 % weight	OECD 310 CO2 Headspace
Aluminum Oxide	1344-28-1	Data not availbl-insufficient			N/A	
Solvent-Refined Heavy Paraffinic Petroleum Distillates	64741-88-4	Experimental Biodegradation	28 days	Carbon dioxide evolution	22 % weight	OECD 301B - Mod. Sturm or CO2
Mineral Oil	64741-89-5	Experimental Biodegradation	28 days	Carbon dioxide evolution	22 % weight	OECD 301B - Mod. Sturm or CO2
Formaldehyde	50-00-0	Experimental Photolysis		Photolytic half-life(in water)	1-2 hours (t 1/2)	Other methods
Formaldehyde	50-00-0	Experimental Biodegradation	28 days	Dissolv. Organic Carbon Deplet	99 % weight	OECD 301A - DOC Die Away Test

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Hydrotreated Light Petroleum Distillates	64742-47-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Dodecamethylcyclohexasiloxane	540-97-6	Experimental BCF - Fathead Mi	49 days	Bioaccumulation Factor	1160	OECD 305E-Bioaccum FI-thru fis
Aluminum Oxide	1344-28-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Solvent-Refined Heavy Paraffinic Petroleum Distillates	64741-88-4	Estimated Bioconcentration		Bioaccumulation Factor	7.5	Est: Bioconcentration factor
Mineral Oil	64741-89-5	Data not available or	N/A	N/A	N/A	N/A

		insufficient for classification				
Formaldehyde	50-00-0	Experimental Bioconcentration		Log of Octanol/H ₂ O part. coeff	0.35	Other methods

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:**UN1760
- Proper Shipping Name:**CORROSIVE LIQUID, N.O.S.
- 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:**UN1760
- Proper Shipping Name:**CORROSIVE LIQUID, N.O.S.
- 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. The components of this product are in compliance with the chemical notification requirements of TSCA.

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