

Safety Data Sheet

Copyright, 2019, 3M Company.

All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

Document Group:	19-2257-4	Version Number:	1.00
Issue Date:	12/12/2019	Supercedes Date:	Initial Issue

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[™] II Paste Rubbing Compound PN 05983, 05984 & 3M[™] Paste Rubbing Compound PN 05983, 05984

Product Identification Numbers 60-4100-0970-2 XS-0414-1657-8

1.2. Recommended use and restrictions on use

Recommended use

Automotive, Removal of imperfections from painted surface

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, SelangorTelephone:03-7884 2888E 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

Specific Target Organ Toxicity (repeated exposure): Category 2.

2.2. Label elements Signal word Warning

Symbols Health Hazard |

Pictograms



Hazard Statements respiratory system H373 May cause damage to organs through prolonged or repeated exposure: respiratory 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:** P260 Do not breathe dust/fume/gas/mist/vapors/spray. P280B Wear protective gloves and eye/face protection. **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

Ingredient	C.A.S. No.	% by Wt
Water	7732-18-5	30 - 60
HYDROTREATED LIGHT PETROLEUM	64742-47-8	10 - 30
DISTILLATES		
Silica	7631-86-9	10 - 30
Decamethylcyclopentasiloxane	541-02-6	< 9
Dodecamethylcyclohexasiloxane	540-97-6	< 7
Kaolinite	1318-74-7	3 - 7
Glycerin	56-81-5	< 5
Illite	12173-60-3	1 - 5
Solvent dewaxed heavy paraffinic distillate	64742-65-0	1 - 5
(petroleum)		
Oleic Acid	112-80-1	0.5 - 1.5
Hydrotreated light paraffinic distillates	64742-55-8	< 1
(petroleum)		
SOLVENT DEWAXED LIGHT	64742-56-9	<1
PARAFFINIC DISTILLATES		
(PETROLEUM)		
Acrylic Polymer	Trade Secret	0.1827 0.1953
Alkyloammonium Salt	Trade Secret	0.1225 0.125 (typically 0.125)
Polycarboxylic Acid Polyester	Trade Secret	0.016 0.12

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 fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

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	<u>Condition</u>
Formaldehyde	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	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. 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. 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

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 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/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep out of reach of children. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. 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 release to the environment. 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. Keep cool. 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, insoluble compounds	1318-74-7	ACGIH	TWA(respirable fraction):1 mg/m3	A4: Not class. as human carcin
Glycerin	56-81-5	Malaysia OELs	TWA(as mist)(8 hours):10 mg/m3	
Mineral oils (untreated and mildly treated)	64742-55-8	ACGIH	Limit value not established:	A2: Suspected human carcin., Cntrl all exposr- low as possib
OIL MIST, MINERAL	64742-55-8	Malaysia OELs	TWA(as mist)(8 hours):5 mg/m3	
Mineral oils (untreated and mildly treated)	64742-56-9	ACGIH	Limit value not established:	A2: Suspected human carcin., Cntrl all exposr- low as possib
MINERAL OILS, HIGHLY- REFINED OILS	64742-56-9	ACGIH	TWA(inhalable fraction):5 mg/m3	A4: Not class. as human carcin
OIL MIST, MINERAL	64742-56-9	Malaysia OELs	TWA(as mist)(8 hours):5 mg/m3	
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.

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

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

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:	Paste
Color	Light Brown
Odor	Slight Solvent
Odor threshold	No Data Available
рН	7.5 - 8.5
Melting point/Freezing point	No Data Available
Boiling point/Initial boiling point/Boiling range	> 65.6 °C
Flash Point	65.6 °C [<i>Test Method</i> :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	No Data Available
Density	1.2 g/ml
Relative Density	1.2 [<i>Ref Std</i> :WATER=1]
Water solubility	Negligible

Solubility- non-water Partition coefficient: n-octanol/ water Autoignition temperature Decomposition temperature Viscosity Molecular weight Volatile Organic Compounds Volatile Organic Compounds Percent volatile VOC Less H2O & Exempt Solvents No Data Available No Data Available No Data Available No Data Available 80,000 - 120,000 mPa-s No Data Available 14.3 % weight [*Test Method*:calculated per CARB title 2] 171 g/l [*Test Method*:calculated SCAQMD rule 443.1] 47 % - 53 % 307 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

Heat Sparks and/or flames

10.5. Incompatible materials

Strong oxidizing agents

10.6. Hazardous decomposition products

Substance 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:

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.

Condition

May cause additional health effects (see below).

Skin Contact:

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

Eye Contact:

Mechanical eye irritation: Signs/symptoms may include pain, redness, tearing and corneal abrasion.

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:

Pneumoconiosis: Sign/symptoms may include persistent cough, breathlessness, chest pain, increased amounts of sputum, and changes in lung function tests.

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- Dust/Mist(4 hr)		No data available; calculated ATE >12.5 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Silica	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Silica	Ingestion	Rat	LD50 > 5,110 mg/kg
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Dermal	Rabbit	LD50 > 5,000 mg/kg
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Inhalation- Vapor (4 hours)	Rat	LC50 > 12 mg/l
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Ingestion	Rat	LD50 > 5,000 mg/kg
Decamethylcyclopentasiloxane	Dermal	Rabbit	LD50 > 15,000 mg/kg
Decamethylcyclopentasiloxane	Inhalation- Dust/Mist (4 hours)	Rat	LC50 8.7 mg/l
Decamethylcyclopentasiloxane	Ingestion	Rat	LD50 > 24,134 mg/kg
Dodecamethylcyclohexasiloxane	Dermal	Rat	LD50 > 2,000 mg/kg
Dodecamethylcyclohexasiloxane	Ingestion	Rat	LD50 > 50,000 mg/kg
Kaolinite	Dermal		LD50 estimated to be > 5,000 mg/kg
Kaolinite	Ingestion	Human	LD50 > 15,000 mg/kg
Glycerin	Dermal	Rabbit	LD50 estimated to be $>$ 5,000 mg/kg
Glycerin	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)	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 4 mg/l
Solvent dewaxed heavy paraffinic distillate (petroleum)	Ingestion	Rat	LD50 > 5,000 mg/kg
Oleic Acid	Dermal	Guinea pig	LD50 > 3,000 mg/kg
Oleic Acid	Ingestion	Rat	LD50 57,000 mg/kg
SOLVENT DEWAXED LIGHT PARAFFINIC DISTILLATES (PETROLEUM)	Dermal	Rabbit	LD50 > 5,000 mg/kg
SOLVENT DEWAXED LIGHT PARAFFINIC DISTILLATES (PETROLEUM)	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 4 mg/l
SOLVENT DEWAXED LIGHT PARAFFINIC DISTILLATES	Ingestion	Rat	LD50 > 5,000 mg/kg

(PETROLEUM)			
Alkyloammonium Salt	Ingestion	Rat	LD50 > 5,385 mg/kg
Alkyloammonium Salt	Dermal	similar	LD50 estimated to be > 5,000 mg/kg
		health	
		hazards	

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Silica	Rabbit	No significant irritation
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Rabbit	Mild irritant
Decamethylcyclopentasiloxane	Rabbit	No significant irritation
Dodecamethylcyclohexasiloxane	Rabbit	No significant irritation
Kaolinite	Professio	No significant irritation
	nal	
	judgemen	
	t	
Glycerin	Rabbit	No significant irritation
Oleic Acid	Rabbit	Minimal irritation
SOLVENT DEWAXED LIGHT PARAFFINIC DISTILLATES (PETROLEUM)	Rabbit	Minimal irritation
Alkyloammonium Salt	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Silica	Rabbit	No significant irritation
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Rabbit	Mild irritant
Decamethylcyclopentasiloxane	Rabbit	No significant irritation
Dodecamethylcyclohexasiloxane	Rabbit	No significant irritation
Kaolinite	Professio	No significant irritation
	nal	
	judgemen	
	t	
Glycerin	Rabbit	No significant irritation
Oleic Acid	Rabbit	Mild irritant
SOLVENT DEWAXED LIGHT PARAFFINIC DISTILLATES (PETROLEUM)	Rabbit	No significant irritation
Alkyloammonium Salt	Rabbit	No significant irritation

Skin Sensitization

Name	Species	Value
Silica	Human	Not classified
	and	
	animal	
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Guinea	Not classified
	pig	
Decamethylcyclopentasiloxane	Mouse	Not classified
Glycerin	Guinea	Not classified
	pig	
SOLVENT DEWAXED LIGHT PARAFFINIC DISTILLATES (PETROLEUM)	Guinea	Not classified
	pig	
Alkyloammonium Salt	Mouse	Sensitizing

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
Silica	In Vitro	Not mutagenic
Decamethylcyclopentasiloxane	In Vitro	Not mutagenic
Decamethylcyclopentasiloxane	In vivo	Not mutagenic

Oleic Acid	In Vitro	Some positive data exist, but the data are not sufficient for classification
SOLVENT DEWAXED LIGHT PARAFFINIC DISTILLATES (PETROLEUM)	In vivo	Not mutagenic
SOLVENT DEWAXED LIGHT PARAFFINIC DISTILLATES (PETROLEUM)	In Vitro	Some positive data exist, but the data are not sufficient for classification
Alkyloammonium Salt	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Silica	Not	Mouse	Some positive data exist, but the data are not
	Specified		sufficient for classification
Decamethylcyclopentasiloxane	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Kaolinite	Inhalation	Multiple animal species	Not carcinogenic
Glycerin	Ingestion	Mouse	Some positive data exist, but the data are not sufficient for classification
Oleic Acid	Dermal	Mouse	Not carcinogenic
Oleic Acid	Ingestion	Rat	Not carcinogenic
Oleic Acid	Not Specified	Multiple animal species	Not carcinogenic
SOLVENT DEWAXED LIGHT PARAFFINIC DISTILLATES (PETROLEUM)	Dermal	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
Silica Ingestion Not classified for female reproduc		Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Silica	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
Decamethylcyclopentasiloxane	Inhalation	Not classified for female reproduction	Rat	NOAEL 2.43 mg/l	2 generation
Decamethylcyclopentasiloxane	Inhalation	Not classified for male reproduction	Rat	NOAEL 2.43 mg/l	2 generation
Decamethylcyclopentasiloxane	Inhalation	Not classified for development	Rat	NOAEL 2.43 mg/l	2 generation
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
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
Alkyloammonium Salt	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating into lactation
Alkyloammonium Salt	Ingestion	Not classified for male reproduction	Rat	NOAEL	28 days

				1,000 mg/kg/day	
Alkyloammonium Salt	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	gestation into lactation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

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

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Silica	Inhalation	respiratory system silicosis	Not classified	Human	NOAEL Not available	occupational exposure
Decamethylcyclopentasilo xane	Dermal	hematopoietic system eyes	Not classified	Rat	NOAEL 1,600 mg/kg/day	28 days
Decamethylcyclopentasilo xane	Inhalation	hematopoietic system respiratory system liver eyes kidney and/or bladder	Not classified	Rat	NOAEL 2.42 mg/l	2 years
Decamethylcyclopentasilo xane	Ingestion	liver immune system respiratory system heart hematopoietic system kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	90 days
Dodecamethylcyclohexasil oxane	Ingestion	endocrine system liver respiratory system nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
Kaolinite	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL NA	occupational exposure
Kaolinite	Inhalation	pulmonary fibrosis	Not classified	Rat	NOAEL Not available	
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
Oleic Acid	Ingestion	liver immune system	Not classified	Rat	NOAEL 2,250 mg/kg/day	108 weeks
Oleic Acid	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 2,550 mg/kg/day	108 weeks
SOLVENT DEWAXED LIGHT PARAFFINIC DISTILLATES (PETROLEUM)	Dermal	hematopoietic system liver kidney and/or bladder	Not classified	Rabbit	NOAEL 5,000 mg/kg/day	3 weeks
Alkyloammonium Salt	Ingestion	hematopoietic system heart endocrine system gastrointestinal tract bone, teeth, nails, and/or hair liver immune system muscles nervous system eyes kidney and/or	Not classified	Rat	NOAEL 1,000 mg/kg/day	35 days

Specific Target Organ Toxicity - repeated exposure

bladder respiratory		
system		

Aspiration Hazard

Name	Value
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Aspiration hazard
SOLVENT DEWAXED LIGHT PARAFFINIC DISTILLATES (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	Туре	Exposure	Test Endpoint	Test Result
HYDROTREA	64742-47-8	Green Algae	Estimated	72 hours	Effect Level	>1,000 mg/l
TED LIGHT					50%	
PETROLEUM						
DISTILLATES						
HYDROTREA	64742-47-8	Rainbow Trout	Estimated	96 hours	Lethal Level	>1,000 mg/l
TED LIGHT					50%	
PETROLEUM						
DISTILLATES						
HYDROTREA	64742-47-8	Water flea	Estimated	48 hours	Effect Level	>1,000 mg/l
TED LIGHT					50%	
PETROLEUM						
DISTILLATES						
HYDROTREA	64742-47-8	Green Algae	Estimated	72 hours	No obs Effect	1,000 mg/l
TED LIGHT					Level	
PETROLEUM						
DISTILLATES						
HYDROTREA	64742-47-8	Water flea	Estimated	21 days	No obs Effect	1 mg/l
TED LIGHT					Level	
PETROLEUM						
DISTILLATES						
Silica	7631-86-9		Data not			
			available or			
			insufficient for			
			classification			
Decamethylcyc	541-02-6	Green Algae	Experimental	96 hours	Effect	>100 mg/l
lopentasiloxane					Concentration	

					50%	
Decamethylcyc lopentasiloxane	541-02-6	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	>100 mg/l
Decamethylcyc lopentasiloxane	541-02-6	Water flea	Experimental	48 hours	Effect Concentration 50%	>100 mg/l
Decamethylcyc lopentasiloxane		Green Algae	Experimental	96 hours	No obs Effect Conc	>100 mg/l
Decamethylcyc lopentasiloxane		Rainbow Trout	1	90 days	No obs Effect Conc	>100 mg/l
Decamethylcyc lopentasiloxane		Water flea	Experimental	21 days	No obs Effect Conc	>100 mg/l
Dodecamethylc yclohexasiloxa ne	540-97-6	Green algae	Experimental	72 hours	Effect Concentration 50%	>100 mg/l
Dodecamethylc yclohexasiloxa ne	540-97-6	Fathead Minnow	Experimental	49 days	No obs Effect Conc	>100 mg/l
Dodecamethylc yclohexasiloxa ne	540-97-6	Green algae	Experimental	72 hours	No obs Effect Conc	>100 mg/l
Dodecamethylc yclohexasiloxa ne	540-97-6	Water flea	Experimental	21 days	No obs Effect Conc	>100 mg/l
Kaolinite	1318-74-7		Data not available or insufficient for classification			
Glycerin	56-81-5	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	54,000 mg/l
Glycerin	56-81-5	Water flea	Experimental	48 hours	Lethal Concentration 50%	1,955 mg/l
Illite	12173-60-3		Data not available or insufficient for classification			
Solvent dewaxed heavy paraffinic distillate (petroleum)	64742-65-0	Green algae	Estimated	96 hours	Effect Concentration 50%	>100 mg/l
Solvent dewaxed heavy paraffinic distillate (petroleum)	64742-65-0	Water flea	Estimated	48 hours	Effect Concentration 50%	>100 mg/l
Solvent dewaxed heavy paraffinic distillate (petroleum)	64742-65-0	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	>100 mg/l
Solvent	64742-65-0	Water flea	Experimental	21 days	No obs Effect	100 mg/l

dewaxed heavy					Conc	1
					Conc	
paraffinic						
distillate						
(petroleum)						
Oleic Acid	112-80-1		Data not			
			available or			
			insufficient for			
			classification			
Hydrotreated	64742-55-8	Fathead	Estimated	96 hours	Lethal Level	>100 mg/l
light paraffinic		Minnow			50%	2
distillates						
(petroleum)						
Hydrotreated	64742-55-8	Water flea	Estimated	48 hours	Effect Level	>100 mg/l
light paraffinic	04/42-33-0	water nea	Estimated	40 110015	50%	> 100 mg/1
					30%	
distillates						
(petroleum)						
Hydrotreated	64742-55-8	Green Algae	Estimated	72 hours	No obs Effect	100 mg/l
light paraffinic					Level	
distillates						
(petroleum)						
Hydrotreated	64742-55-8	Water flea	Estimated	21 days	No obs Effect	10 mg/l
light paraffinic					Conc	
distillates						
(petroleum)						
SOLVENT	64742-56-9	Fathead	Estimated	96 hours	Lethal Level	>100 mg/l
DEWAXED	04/42-30-9	Minnow	Estimated	90 HOUIS	50%	~100 llig/1
		Minnow			30%	
LIGHT						
PARAFFINIC						
DISTILLATES						
(PETROLEUM						
)						
SOLVENT	64742-56-9	Green algae	Estimated	72 hours	Effect Level	>100 mg/l
DEWAXED					50%	
LIGHT						
PARAFFINIC						
DISTILLATES						
(PETROLEUM						
)						
SOLVENT	64742-56-9	Water flea	Estimated	48 hours	Effect Level	>100 mg/l
DEWAXED	0.17.12.000		2500000		50%	100 mg/1
LIGHT					5070	
PARAFFINIC						
DISTILLATES						
(PETROLEUM						
)		~ .				
SOLVENT	64742-56-9	Green algae	Estimated	72 hours	No obs Effect	>100 mg/l
DEWAXED					Level	
LIGHT						
PARAFFINIC						
DISTILLATES						
(PETROLEUM						
Ď						
SOLVENT	64742-56-9	Water flea	Estimated	21 days	No obs Effect	>100 mg/l
DEWAXED					Level	
LIGHT						
610111	I	1	1	I	1	I

PARAFFINIC DISTILLATES (PETROLEUM)						
Acrylic Polymer	Trade Secret		Data not available or insufficient for classification			
Alkyloammoni um Salt	Trade Secret	Green Algae	Experimental	72 hours	Effect Level 50%	105 mg/l
Alkyloammoni um Salt	Trade Secret	Rainbow Trout	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
Alkyloammoni um Salt	Trade Secret	Water flea	Experimental	48 hours	No tox obs at lmt of water sol	>100 mg/l
Alkyloammoni um Salt	Trade Secret	Green Algae	Experimental	72 hours	Effect Level 10%	40 mg/l

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
HYDROTREA TED LIGHT PETROLEUM DISTILLATES	64742-47-8	Estimated Biodegradation	28 hours	Biological Oxygen Demand	22.4 % BOD/ThBOD	OECD 301F - Manometric Respiro
Silica	7631-86-9	Data not availbl- insufficient			N/A	
Decamethylcyc lopentasiloxane	541-02-6	Experimental Photolysis		Photolytic half- life (in air)	20.4 days (t 1/2)	Other methods
Decamethylcyc lopentasiloxane	541-02-6	Experimental Hydrolysis		Hydrolytic half-life	66 days (t 1/2)	Other methods
Decamethylcyc lopentasiloxane	541-02-6	Experimental Biodegradation	28 days	Carbon dioxide evolution	0.14 % weight	OECD 310 CO2 Headspace
Dodecamethylc yclohexasiloxa ne	540-97-6	Experimental Biodegradation	28 days	Carbon dioxide evolution	4.47 % weight	OECD 310 CO2 Headspace
Kaolinite	1318-74-7	Data not availbl- insufficient			N/A	
Glycerin	56-81-5	Experimental Biodegradation	14 days	Biological Oxygen Demand	63 % BOD/ThBOD	OECD 301C - MITI (I)
Illite	12173-60-3	Data not availbl- insufficient			N/A	
Solvent dewaxed heavy paraffinic distillate (petroleum)	64742-65-0	Experimental Biodegradation	28 days	Carbon dioxide evolution	23 % weight	Other methods
Öleic Acid	112-80-1	Experimental Biodegradation	28 days	Biological Oxygen Demand	78 % BOD/ThBOD	OECD 301C - MITI (I)
Hydrotreated	64742-55-8	Estimated	28 days	Carbon dioxide	22 %CO2	OECD 301B - Mod.

light paraffinic distillates (petroleum)		Biodegradation		evolution	evolution/THC O2 evolution	Sturm or CO2
SOLVENT DEWAXED LIGHT PARAFFINIC DISTILLATES (PETROLEUM)	64742-56-9	Estimated Aquatic Biodegrad Aerobic	28 days	Biological Oxygen Demand	31 % weight	OECD 301F - Manometric Respiro
Acrylic Polymer	Trade Secret	Data not availbl- insufficient			N/A	
Alkyloammoni um Salt	Trade Secret	Experimental Biodegradation	28 days	Biological Oxygen Demand	23 % BOD/ThBOD	OECD 301F - Manometric Respiro

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
HYDROTREA TED LIGHT PETROLEUM DISTILLATES	64742-47-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Silica	7631-86-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Decamethylcyc lopentasiloxane		Experimental BCF - Fathead Mi	35 days	Bioaccumulatio n Factor	7060	OECD 305E-Bioaccum Fl-thru fis
Dodecamethylc yclohexasiloxa ne	540-97-6	Experimental BCF - Fathead Mi	49 days	Bioaccumulatio n Factor	1160	OECD 305E-Bioaccum Fl-thru fis
Kaolinite	1318-74-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Glycerin	56-81-5	Experimental Bioconcentrati on		Log of Octanol/H2O part. coeff	-1.76	Other methods
Illite	12173-60-3	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
Öleic Acid	112-80-1	Experimental Bioconcentrati on		Log of Octanol/H2O part. coeff	7.64	Other methods
Hydrotreated light paraffinic	64742-55-8	Data not available or	N/A	N/A	N/A	N/A

distillates (petroleum)		insufficient for classification				
SOLVENT DEWAXED LIGHT PARAFFINIC DISTILLATES (PETROLEUM)		Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Acrylic Polymer	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Alkyloammoni um Salt	Trade Secret	Experimental Bioconcentrati on		Log of Octanol/H2O part. coeff	< 1	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: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

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS. 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 Philippines RA 6969 requirements. 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 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. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA 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