



## 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™ Hand Glaze, 05989, 05990, 06000, 39007

#### Product Identification Numbers

60-4550-7156-7      60-4550-7157-5      60-4550-7158-3      60-4550-7159-1

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Automotive, Remove defects from painted surfaces.

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**

**Disposal:**

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

**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	7732-18-5	60 - 100
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	< 10
Medium Aliphatic Solvent Naphtha	64742-88-7	< 10
White Mineral Oil (Petroleum)	8042-47-5	3 - 7
Processed Castor Oil	Trade Secret	1 - 5
Glycerin	56-81-5	< 5
Kaolin, calcined	92704-41-1	1 - 5
Titanium dioxide	13463-67-7	< 1

### 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**

Hydrocarbons  
Carbon monoxide  
Carbon dioxide  
Oxides of Nitrogen

**Condition**

During Combustion  
During Combustion  
During Combustion  
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 an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Avoid breathing 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. Use personal protective equipment (gloves, respirators, etc.) as required.

**7.2. Conditions for safe storage including any incompatibilities**

Store in a well-ventilated place.

**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
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DUST, INERT OR NUISANCE	13463-67-7	Malaysia OELs	TWA (proposed)(respirable particles)(8 hours):3 mg/m <sup>3</sup> ;TWA (proposed)(Inhalable particulate)(8 hours):10 mg/m <sup>3</sup>	
Titanium dioxide	13463-67-7	ACGIH	TWA(Respirable nanoscale particles):0.2 mg/m <sup>3</sup> ;TWA(Respirable finescale particles):2.5 mg/m <sup>3</sup>	A3: Confirmed animal carcin.
Titanium dioxide	13463-67-7	Malaysia OELs	TWA(8 hours):10 mg/m <sup>3</sup>	
DUST, INERT OR NUISANCE	56-81-5	Malaysia OELs	TWA (proposed)(respirable particles)(8 hours):3 mg/m <sup>3</sup> ;TWA (proposed)(Inhalable particulate)(8 hours):10 mg/m <sup>3</sup>	
Glycerin	56-81-5	Malaysia OELs	TWA(as mist)(8 hours):10 mg/m <sup>3</sup>	
Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles	56-81-5	ACGIH	TWA(inhalable particulates):10 mg/m <sup>3</sup>	
Particles (insoluble or poorly soluble) not otherwise specified, respirable particles	56-81-5	ACGIH	TWA(respirable particles):3 mg/m <sup>3</sup>	
Kerosine (petroleum)	64742-47-8	ACGIH	TWA(as total hydrocarbon vapor, non-aerosol):200 mg/m <sup>3</sup>	A3: Confirmed animal carcin., SKIN
Kerosine (petroleum)	64742-88-7	ACGIH	TWA(as total hydrocarbon vapor, non-aerosol):200 mg/m <sup>3</sup>	A3: Confirmed animal carcin., SKIN
Naphtha	64742-88-7	Malaysia OELs	TWA(8 hours):1590 mg/m <sup>3</sup> (400 ppm)	
MINERAL OILS, HIGHLY-REFINED OILS	8042-47-5	ACGIH	TWA(inhalable fraction):5 mg/m <sup>3</sup>	A4: Not class. as human carcin
OIL MIST, MINERAL	8042-47-5	Malaysia OELs	TWA(as mist)(8 hours):5 mg/m <sup>3</sup>	

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

None required.

#### 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: Fluoroelastomer  
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
Color	Light Orange-Brown
Odor	Faint Odor, Sweet Odor
Odor threshold	<i>No Data Available</i>
pH	8 - 8.4
Melting point/Freezing point	<i>No Data Available</i>
Boiling point/Initial boiling point/Boiling range	100 °C
Flash Point	Flash point > 93 °C (200 °F)
Evaporation rate	<i>No Data Available</i>
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	<i>No Data Available</i>
Flammable Limits(UEL)	<i>No Data Available</i>
Vapor Pressure	2,399.8 Pa
Vapor Density and/or Relative Vapor Density	<i>No Data Available</i>
Density	0.982 - 1.006 g/ml
Relative Density	0.982 - 1.006 [Ref Std:WATER=1]
Water solubility	<i>No Data Available</i>
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	<i>No Data Available</i>
Decomposition temperature	<i>No Data Available</i>
Viscosity/Kinematic Viscosity	4,000 - 7,000 mPa-s
Volatile Organic Compounds	9.1 % weight [Test Method:calculated per CARB title 2]
Volatile Organic Compounds	91 g/l [Test Method:calculated SCAQMD rule 443.1]
Percent volatile	84.1 %
VOC Less H2O & Exempt Solvents	373 g/l [Test Method:calculated SCAQMD rule 443.1]
Molecular weight	<i>No Data Available</i>

## 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

None known.

### 10.5. Incompatible materials

None known.

### 10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

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

### 11.1. Information on Toxicological effects

#### Signs and Symptoms of Exposure

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

#### Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

#### Skin Contact:

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

#### Eye Contact:

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

#### Ingestion:

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

#### Additional Health Effects:

#### Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

#### Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

#### Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Medium Aliphatic Solvent Naphtha	Inhalation-Vapor		LC50 estimated to be 20 - 50 mg/l
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Inhalation-Vapor	Professional judgment	LC50 estimated to be 20 - 50 mg/l
Medium Aliphatic Solvent Naphtha	Dermal	Rabbit	LD50 > 3,000 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
Medium Aliphatic Solvent Naphtha	Ingestion	Rat	LD50 > 5,000 mg/kg
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Dermal	similar compounds	LD50 > 2,000 mg/kg
White Mineral Oil (Petroleum)	Dermal	Rabbit	LD50 > 2,000 mg/kg
White Mineral Oil (Petroleum)	Ingestion	Rat	LD50 > 5,000 mg/kg
Kaolin, calcined	Dermal	similar compounds	LD50 > 5,000 mg/kg
Kaolin, calcined	Ingestion	similar compounds	LD50 > 5,000 mg/kg
Glycerin	Dermal	Rabbit	LD50 estimated to be > 5,000 mg/kg
Glycerin	Ingestion	Rat	LD50 > 5,000 mg/kg
Titanium dioxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium dioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.09 mg/l
Titanium dioxide	Ingestion	Rat	LD50 > 10,000 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Rabbit	Mild irritant
Medium Aliphatic Solvent Naphtha	Rabbit	Irritant
White Mineral Oil (Petroleum)	Rabbit	No significant irritation
Kaolin, calcined	Rabbit	No significant irritation
Glycerin	Rabbit	No significant irritation
Titanium dioxide	Rabbit	No significant irritation

**Serious Eye Damage/Irritation**

Name	Species	Value
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Rabbit	Mild irritant
Medium Aliphatic Solvent Naphtha	Rabbit	No significant irritation
White Mineral Oil (Petroleum)	Rabbit	Mild irritant
Kaolin, calcined	Rabbit	No significant irritation
Glycerin	Rabbit	No significant irritation
Titanium dioxide	Rabbit	No significant irritation

**Sensitization:****Skin Sensitization**

Name	Species	Value
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Guinea	Not classified

	pig	
Medium Aliphatic Solvent Naphtha	Guinea pig	Not classified
White Mineral Oil (Petroleum)	Guinea pig	Not classified
Glycerin	Guinea pig	Not classified
Titanium dioxide	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
Medium Aliphatic Solvent Naphtha	In vivo	Not mutagenic
Medium Aliphatic Solvent Naphtha	In Vitro	Some positive data exist, but the data are not sufficient for classification
White Mineral Oil (Petroleum)	In Vitro	Not mutagenic

### Carcinogenicity

Name	Route	Species	Value
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Medium Aliphatic Solvent Naphtha	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Medium Aliphatic Solvent Naphtha	Inhalation	Human and animal	Some positive data exist, but the data are not sufficient for classification
White Mineral Oil (Petroleum)	Dermal	Mouse	Not carcinogenic
White Mineral Oil (Petroleum)	Inhalation	Multiple animal species	Not carcinogenic
Glycerin	Ingestion	Mouse	Some positive data exist, but the data are not sufficient for classification
Titanium dioxide	Inhalation	Rat	Carcinogenic

### Reproductive Toxicity

#### Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Medium Aliphatic Solvent Naphtha	Inhalation	Not classified for development	Rat	NOAEL 2.4 mg/l	during organogenesis
White Mineral Oil (Petroleum)	Ingestion	Not classified for female reproduction	Rat	NOAEL 4,350 mg/kg/day	13 weeks
White Mineral Oil (Petroleum)	Ingestion	Not classified for male reproduction	Rat	NOAEL 4,350 mg/kg/day	13 weeks
White Mineral Oil (Petroleum)	Ingestion	Not classified for development	Rat	NOAEL 4,350 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
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 Notavailable	
Medium Aliphatic Solvent Naphtha	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Medium Aliphatic Solvent Naphtha	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Medium Aliphatic Solvent Naphtha	Inhalation	nervous system	Not classified	Dog	NOAEL 6.5 mg/l	4 hours
Medium Aliphatic Solvent Naphtha	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Medium Aliphatic Solvent Naphtha	Inhalation	nervous system	Not classified	Rat	LOAEL 4.6 mg/l	6 months
Medium Aliphatic Solvent Naphtha	Inhalation	kidney and/or bladder	Not classified	Rat	LOAEL 1.9 mg/l	13 weeks
Medium Aliphatic Solvent Naphtha	Inhalation	respiratory system	Not classified	Multiple animal species	NOAEL 0.6 mg/l	90 days
Medium Aliphatic Solvent Naphtha	Inhalation	bone, teeth, nails, and/or hair   blood   liver   muscles	Not classified	Rat	NOAEL 5.6 mg/l	12 weeks
Medium Aliphatic Solvent Naphtha	Inhalation	heart	Not classified	Multiple animal species	NOAEL 1.3 mg/l	90 days
White Mineral Oil (Petroleum)	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 1,381 mg/kg/day	90 days
White Mineral Oil (Petroleum)	Ingestion	liver   immune system	Not classified	Rat	NOAEL 1,336 mg/kg/day	90 days
Kaolin, calcined	Inhalation	pneumoconiosis	Not classified	similar compounds	NOAEL not available	occupational exposure
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

Medium Aliphatic Solvent Naphtha	Aspiration hazard
White Mineral Oil (Petroleum)	Aspiration hazard

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

## SECTION 12: Ecological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labeling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

### 12.1. Toxicity

#### Acute aquatic hazard:

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
HYDROTREATE D LIGHT PETROLEUM DISTILLATES	64742-47-8	Green algae	Estimated	72 hours	EC50	1 mg/l
HYDROTREATE D LIGHT PETROLEUM DISTILLATES	64742-47-8	Rainbow Trout	Estimated	96 hours	LL50	2 mg/l
HYDROTREATE D LIGHT PETROLEUM DISTILLATES	64742-47-8	Water flea	Estimated	48 hours	EL50	1.4 mg/l
HYDROTREATE D LIGHT PETROLEUM DISTILLATES	64742-47-8	Green algae	Estimated	72 hours	NOEL	1 mg/l
HYDROTREATE D LIGHT PETROLEUM DISTILLATES	64742-47-8	Water flea	Estimated	21 days	NOEL	0.48 mg/l
Medium Aliphatic Solvent Naphtha	64742-88-7	Green algae	Analogous Compound	72 hours	EL50	8.3 mg/l
Medium Aliphatic Solvent Naphtha	64742-88-7	Rainbow Trout	Analogous Compound	96 hours	LL50	20 mg/l
Medium Aliphatic Solvent Naphtha	64742-88-7	Water flea	Analogous Compound	48 hours	EL50	1.4 mg/l
Medium Aliphatic Solvent Naphtha	64742-88-7	Green algae	Analogous Compound	72 hours	NOEL	4 mg/l
Medium Aliphatic Solvent Naphtha	64742-88-7	Water flea	Analogous Compound	21 days	NOEL	0.48 mg/l
White Mineral Oil (Petroleum)	8042-47-5	Water flea	Analogous Compound	48 hours	EL50	>100 mg/l
White Mineral Oil (Petroleum)	8042-47-5	Bluegill	Experimental	96 hours	LL50	>100 mg/l
White Mineral Oil (Petroleum)	8042-47-5	Green algae	Analogous Compound	72 hours	NOEL	100 mg/l
White Mineral Oil	8042-47-5	Water flea	Analogous	21 days	NOEL	>100 mg/l

(Petroleum)			Compound			
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
Kaolin, calcined	92704-41-1	Bacteria	Estimated	16 hours	EC10	1,400 mg/l
Kaolin, calcined	92704-41-1	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Titanium dioxide	13463-67-7	Activated sludge	Experimental	3 hours	NOEC	1,000 mg/l
Titanium dioxide	13463-67-7	Goldfish	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
Titanium dioxide	13463-67-7	Green algae	Experimental	72 hours	No tox obs at lmt of water sol	>100 mg/l
Titanium dioxide	13463-67-7	Water flea	Experimental	48 hours	No tox obs at lmt of water sol	>100 mg/l
Titanium dioxide	13463-67-7	Green algae	Experimental	72 hours	No tox obs at lmt of water sol	>100 mg/l
Titanium dioxide	13463-67-7	Water flea	Experimental	21 days	No tox obs at lmt of water sol	>100 mg/l
Titanium dioxide	13463-67-7	Zebra Fish	Experimental	23 days	No tox obs at lmt of water sol	>100 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 available/insufficient	N/A	N/A	N/A	N/A
Medium Aliphatic Solvent Naphtha	64742-88-7	Experimental Biodegradation	28 days	Carbon dioxide evolution	55 %CO2 evolution/THCO2 evolution	OECD 301B - Mod. Sturm or CO2
White Mineral Oil (Petroleum)	8042-47-5	Experimental Biodegradation	28 days	Carbon dioxide evolution	0 %CO2 evolution/THCO2 evolution	OECD 301B - Mod. Sturm or CO2
Glycerin	56-81-5	Experimental Biodegradation	14 days	Biological Oxygen Demand	63 %BOD/ThOD	OECD 301C - MITI (I)
Kaolin, calcined	92704-41-1	Data not available/insufficient	N/A	N/A	N/A	N/A
Titanium dioxide	13463-67-7	Data not available/insufficient	N/A	N/A	N/A	N/A

## 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
Medium Aliphatic Solvent Naphtha	64742-88-7	Modeled Bioconcentration		Log of Octanol/H2O part. coeff	6	
White Mineral Oil (Petroleum)	8042-47-5	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	
Kaolin, calcined	92704-41-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Titanium dioxide	13463-67-7	Data not available	N/A	N/A	N/A	N/A

		or insufficient for classification				
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**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 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 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](http://www.3M.com.my)