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™ Super Duty Rubbing Compound, 5954, 5955, 5956, 39004, 59002

Product Identification Numbers
60-4100-0979-3 60-4100-0980-1 60-4400-9518-4 60-4550-5172-6

1.2. Recommended use and restrictions on use

Recommended use
Automotive, Painted surface defect repair

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
Carcinogenicity: Category 1A.
Specific Target Organ Toxicity (repeated exposure): Category 1.
Chronic Aquatic Toxicity: Category 3.

2.2. Label elements
Signal word
Danger

Symbols
Health Hazard |

Pictograms

Hazard Statements

H350	May cause cancer.
H372	Causes damage to organs through prolonged or repeated exposure: respiratory system |
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

General:

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

Prevention:

P201	Obtain special instructions before use.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P280B	Wear protective gloves and eye/face protection.
P281	Use personal protective equipment as required.

Response:

P308 + P313	IF exposed or concerned: Get medical advice/attention.

Storage:

P405	Store locked up.

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
Tripoli	1317-95-9	30 - 60
Water	7732-18-5	10 - 30
Kerosene	8008-20-6	< 15
Solvent dewaxed heavy paraffinic distillate (petroleum)	64742-65-0	1 - 5
Light Aromatic Hydrocarbons	64742-47-8	<= 4
Oleic Acid	112-80-1	< 2
Pine Oil	8002-09-3	< 2
Hydrotreated light paraffinic distillates (petroleum)	64742-55-8	< 1.5
Solvent Dewaxed Light Paraffinic Distillates (Petroleum)	64742-56-9	< 1.5

Polyethylene Glycol Sorbitan Monooleate	9005-65-6	0.5 - 1.5
Naphthalene	91-20-3	< 0.5

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	Condition
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
Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a 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
Do not use in a confined area with minimal air exchange. Keep out of reach of children. Do not handle until all safety precautions have been read and understood. 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.) Use personal protective equipment (gloves, respirators, etc.) as required.

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
Tripoli	1317-95-9	ACGIH	TWA(respirable fraction):0.025 mg/m3	A2: Suspected human carcin.
Tripoli	1317-95-9	Malaysia OELs	TWA(respirable fraction)(8 hours):0.1 mg/m3	
Kerosine (petroleum)	64742-47-8	ACGIH	TWA(as total hydrocarbon vapor, non-aerosol):200 mg/m3	A3: Confirmed animal carcin., SKIN
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	
Kerosene	8008-20-6	ACGIH	TWA(as total hydrocarbon vapor, non-aerosol):200 mg/m3	A3: Confirmed animal carcin., SKIN
Naphthalene	91-20-3	ACGIH	TWA:10 ppm	A3: Confirmed animal carcin., Danger of cutaneous absorption
Naphthalene	91-20-3	Malaysia OELs	TWA(8 hours):52 mg/m3(10 ppm)	

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.
Gloves made from the following material(s) are recommended: Fluoroelastomer
Neoprene
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:	Emulsion
Color	Brown

Odor	Petroleum
Odor threshold	*No Data Available*
pH	7.5 - 8.5
Melting point/Freezing point	*Not Applicable*
Boiling point/Initial boiling point/Boiling range	> 35 ºC
Flash Point	71.1 ºC [*Test Method:*Closed Cup]
Evaporation rate	*No Data Available*
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	*No Data Available*
Flammable Limits(UEL)	*No Data Available*
Vapor Pressure	*No Data Available*
Vapor Density and/or Relative Vapor Density	*No Data Available*
Density	1.33 g/ml
Relative Density	1.33 [*Ref Std:*WATER=1]
Water solubility	Negligible
Solubility- non-water	*No Data Available*
Partition coefficient: n-octanol/ water	*No Data Available*
Autoignition temperature	*No Data Available*
Decomposition temperature	*No Data Available*
Viscosity/Kinematic Viscosity	14,000 mPa-s - 18,000 mPa-s
Volatile Organic Compounds	291 g/l [*Test Method:*calculated SCAQMD rule 443.1]
Volatile Organic Compounds	15.9 % weight [*Test Method:*calculated per CARB title 2]
Percent volatile	48.1 % weight [*Test Method:*Estimated]
VOC Less H2O & Exempt Solvents	447 g/l [*Test Method:*calculated SCAQMD rule 443.1]
Molecular weight	*No Data Available*

Nanoparticles
This material does not contain nanoparticles.

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

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.

May cause additional health effects (see below).

Skin Contact:
Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness. May cause additional health effects (see below).

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.

May cause additional health effects (see below).

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:
Silicosis: Signs/symptoms may include breathlessness, weakness, chest pain, persistent cough, increased amounts of sputum, and heart disease.

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	Ingestion		No data available; calculated ATE >5,000 mg/kg
Tripoli	Dermal		LD50 estimated to be > 5,000 mg/kg
Tripoli	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Kerosene	Dermal	Rabbit	LD50 > 2,000 mg/kg
Kerosene	Inhalation-Vapor (4	Rat	LC50 > 5 mg/l

	hours)		
Kerosene	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
Light Aromatic Hydrocarbons	Inhalation-Vapor	Professional judgement	LC50 estimated to be 20 - 50 mg/l
Light Aromatic Hydrocarbons	Dermal	Rabbit	LD50 > 5,000 mg/kg
Light Aromatic Hydrocarbons	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
Pine Oil	Dermal	Rat	LD50 > 2,000 mg/kg
Pine Oil	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 4.76 mg/l
Pine Oil	Ingestion	Rat	LD50 > 2,000 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 (Petroleum)	Ingestion	Rat	LD50 > 5,000 mg/kg
Polyethylene Glycol Sorbitan Monooleate	Dermal	Not available	LD50 > 5,000 mg/kg
Polyethylene Glycol Sorbitan Monooleate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.1 mg/l
Polyethylene Glycol Sorbitan Monooleate	Ingestion	Rat	LD50 20,000 mg/kg
Naphthalene	Dermal	Human	LD50 estimated to be 2,000 - 5,000 mg/kg
Naphthalene	Inhalation-Vapor	Human	LC50 estimated to be 20 - 50 mg/l
Naphthalene	Ingestion	Human	LD50 estimated to be 300 - 2,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Tripoli	Professional judgement	No significant irritation
Kerosene	Rabbit	Minimal irritation
Light Aromatic Hydrocarbons	Rabbit	Minimal irritation
Oleic Acid	Rabbit	Minimal irritation
Pine Oil	Rabbit	Irritant
Solvent Dewaxed Light Paraffinic Distillates (Petroleum)	Rabbit	Minimal irritation
Polyethylene Glycol Sorbitan Monooleate	Rabbit	No significant irritation
Naphthalene	Rabbit	Minimal irritation

Serious Eye Damage/Irritation

Name	Species	Value
Kerosene	Rabbit	No significant irritation
Light Aromatic Hydrocarbons	Rabbit	Mild irritant
Oleic Acid	Rabbit	Mild irritant
Pine Oil	Rabbit	Moderate irritant
Solvent Dewaxed Light Paraffinic Distillates (Petroleum)	Rabbit	No significant irritation
Polyethylene Glycol Sorbitan Monooleate	Rabbit	No significant irritation
Naphthalene	Rabbit	No significant irritation

Sensitization:

Skin Sensitization

Name	Species	Value
Kerosene	Guinea pig	Not classified
Light Aromatic Hydrocarbons	Guinea pig	Not classified
Pine Oil	Human and animal	Not classified
Solvent Dewaxed Light Paraffinic Distillates (Petroleum)	Guinea pig	Not classified
Polyethylene Glycol Sorbitan Monooleate	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
Tripoli	In Vitro	Some positive data exist, but the data are not sufficient for classification
Tripoli	In vivo	Some positive data exist, but the data are not sufficient for classification
Kerosene	In Vitro	Some positive data exist, but the data are not sufficient for classification
Kerosene	In vivo	Some positive data exist, but the data are not sufficient for classification
Light Aromatic Hydrocarbons	In Vitro	Not mutagenic
Light Aromatic Hydrocarbons	In vivo	Not mutagenic
Oleic Acid	In Vitro	Some positive data exist, but the data are not sufficient for classification
Pine Oil	In Vitro	Not mutagenic
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
Polyethylene Glycol Sorbitan Monooleate	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Tripoli	Inhalation	Human and animal	Carcinogenic
Kerosene	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Light Aromatic Hydrocarbons	Not Specified	Not available	Not carcinogenic
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
Polyethylene Glycol Sorbitan Monooleate	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
Naphthalene	Inhalation	Multiple animal species	Carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Kerosene	Dermal	Not classified for female reproduction	Rat	NOAEL 494 mg/kg/day	premating & during gestation
Kerosene	Dermal	Not classified for male reproduction	Rat	NOAEL 494 mg/kg/day	premating & during gestation
Kerosene	Dermal	Not classified for development	Rat	NOAEL 494 mg/kg/day	premating & during gestation
Kerosene	Inhalation	Not classified for development	Rat	NOAEL 400 ppm	during organogenesis
Light Aromatic Hydrocarbons	Not Specified	Not classified for female reproduction	Rat	NOAEL Not available	1 generation
Light Aromatic Hydrocarbons	Not Specified	Not classified for male reproduction	Rat	NOAEL Not available	1 generation
Light Aromatic Hydrocarbons	Not Specified	Not classified for development	Rat	NOAEL Not available	1 generation
Pine Oil	Ingestion	Not classified for development	Rat	NOAEL 600 mg/kg/day	during gestation
Pine Oil	Ingestion	Not classified for female reproduction	Rat	NOAEL 250 mg/kg/day	premating into lactation
Pine Oil	Ingestion	Not classified for male reproduction	Rat	NOAEL 250 mg/kg/day	5 weeks
Polyethylene Glycol Sorbitan Monooleate	Ingestion	Not classified for female reproduction	Rat	NOAEL 6,666 mg/kg/day	3 generation
Polyethylene Glycol Sorbitan Monooleate	Ingestion	Not classified for male reproduction	Rat	NOAEL 6,666 mg/kg/day	3 generation
Polyethylene Glycol Sorbitan Monooleate	Ingestion	Not classified for development	Rat	NOAEL 5,000 mg/kg/day	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Kerosene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL not available	occupational exposure
Kerosene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL not available	not available
Kerosene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL not available	poisoning and/or abuse
Kerosene	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL not available	not applicable
Kerosene	Ingestion	liver	Not classified	Rat	LOAEL 18,912 mg/kg	not applicable
Kerosene	Ingestion	heart | hematoppoitic system	Not classified	Human	NOAEL not available	poisoning and/or abuse
Pine Oil	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL not available	
Naphthalene	Ingestion	blood	Causes damage to organs	Human	NOAEL Not available	poisoning and/or abuse

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Tripoli	Inhalation	silicosis	Causes damage to organs through	Human	NOAEL Not	occupational

			prolonged or repeated exposure		available	exposure
Kerosene	Dermal	hematopoietic system	Not classified	Mouse	NOAEL 500 mg/kg/day	13 weeks
Kerosene	Dermal	liver | immune system | kidney and/or bladder	Not classified	Mouse	NOAEL 500 mg/kg/day	2 years
Kerosene	Dermal	nervous system	Not classified	Mouse	NOAEL 2,700 mg/kg/day	1 weeks
Kerosene	Dermal	heart | gastrointestinal tract | muscles | respiratory system	Not classified	Mouse	NOAEL 500 mg/kg/day	2 years
Kerosene	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL not available	1 years
Kerosene	Inhalation	liver	Not classified	Rat	NOAEL 0.231 mg/l	14 weeks
Kerosene	Inhalation	heart	Not classified	Guinea pig	LOAEL 20.4 mg/l	not available
Kerosene	Inhalation	gastrointestinal tract | hematopoietic system | muscles | respiratory system	Not classified	Multiple animal species	NOAEL 0.1 mg/l	13 weeks
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
Pine Oil	Inhalation	hematopoietic system | eyes | respiratory system	Not classified	Rat	NOAEL 2.23 mg/l	13 weeks
Pine Oil	Ingestion	liver | kidney and/or bladder | heart | skin | endocrine system | gastrointestinal tract | bone, teeth, nails, and/or hair | hematopoietic system | immune system | muscles | nervous system | respiratory system	Not classified	Rat	NOAEL 750 mg/kg/day	5 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
Polyethylene Glycol Sorbitan Monooleate	Ingestion	heart | endocrine system | gastrointestinal tract | bone, teeth, nails, and/or hair | hematopoietic system | liver | immune system | nervous system | kidney and/or bladder | respiratory system	Not classified	Rat	NOAEL 4,132 mg/kg/day	90 days
Naphthalene	Dermal	blood	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Naphthalene	Dermal	eyes	Not classified	Human	NOAEL Not available	occupational exposure
Naphthalene	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.01 mg/l	13 weeks
Naphthalene	Inhalation	blood	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Naphthalene	Inhalation	eyes	Not classified	Human	NOAEL Not	occupational

					available	exposure
Naphthalene	Ingestion	blood	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Naphthalene	Ingestion	eyes	May cause damage to organs though prolonged or repeated exposure	Rabbit	LOAEL 500 mg/kg/day	15 days

Aspiration Hazard

Name	Value
Kerosene	Aspiration hazard
Light Aromatic Hydrocarbons	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:
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
Tripoli	1317-95-9		Data not available or insufficient for classification			
Kerosene	8008-20-6	Rainbow Trout	Estimated	96 hours	Lethal Level 50%	>=2 mg/l
Kerosene	8008-20-6	Water flea	Estimated	48 hours	Effect Level 50%	1.4 mg/l
Kerosene	8008-20-6	Green Algae	Experimental	72 hours	Effect Level 50%	>1 mg/l
Kerosene	8008-20-6	Water flea	Estimated	21 days	No obs Effect Level	0.48 mg/l
Kerosene	8008-20-6	Green Algae	Experimental	72 hours	No obs Effect Level	1 mg/l
Solvent dewaxed heavy paraffinic distillate (petroleum)	64742-65-0	Green algae	Estimated	96 hours	Effect Concentration 50%	>100 mg/l
Solvent dewaxed heavy	64742-65-0	Water flea	Estimated	48 hours	Effect Concentration	>100 mg/l

paraffinic distillate (petroleum)					50%	
Solvent dewaxed heavy paraffinic distillate (petroleum)	64742-65-0	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	>100 mg/l
Solvent dewaxed heavy paraffinic distillate (petroleum)	64742-65-0	Water flea	Experimental	21 days	No obs Effect Conc	100 mg/l
Light Aromatic Hydrocarbons	64742-47-8	Green Algae	Experimental	72 hours	Effect Level 50%	>1,000 mg/l
Light Aromatic Hydrocarbons	64742-47-8	Rainbow Trout	Experimental	96 hours	Lethal Level 50%	>1,000 mg/l
Light Aromatic Hydrocarbons	64742-47-8	Water flea	Experimental	48 hours	Effect Level 50%	>1,000 mg/l
Light Aromatic Hydrocarbons	64742-47-8	Green Algae	Experimental	72 hours	No obs Effect Level	1,000 mg/l
Oleic Acid	112-80-1		Data not available or insufficient for classification			
Pine Oil	8002-09-3	Green Algae	Estimated	72 hours	Effect Concentration 50%	68 mg/l
Pine Oil	8002-09-3	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	18.4 mg/l
Pine Oil	8002-09-3	Water flea	Experimental	48 hours	Effect Concentration 50%	24.5 mg/l
Pine Oil	8002-09-3	Green Algae	Estimated	72 hours	No obs Effect Conc	3.9 mg/l
Hydrotreated light paraffinic distillates (petroleum)	64742-55-8	Fathead Minnow	Estimated	96 hours	Lethal Level 50%	>100 mg/l
Hydrotreated light paraffinic distillates (petroleum)	64742-55-8	Water flea	Estimated	48 hours	Effect Level 50%	>100 mg/l
Hydrotreated light paraffinic distillates (petroleum)	64742-55-8	Green Algae	Estimated	72 hours	No obs Effect Level	100 mg/l
Hydrotreated light paraffinic distillates (petroleum)	64742-55-8	Water flea	Estimated	21 days	No obs Effect Conc	10 mg/l
Polyethylene Glycol Sorbitan Monooleate	9005-65-6	Copepods	Estimated	48 hours	Lethal Level 50%	>10,000 mg/l

Polyethylene Glycol Sorbitan Monooleate	9005-65-6	Green Algae	Estimated	72 hours	Effect Level 50%	58.84 mg/l
Polyethylene Glycol Sorbitan Monooleate	9005-65-6	Zebra Fish	Estimated	96 hours	Lethal Concentration 50%	>100 mg/l
Polyethylene Glycol Sorbitan Monooleate	9005-65-6	Green Algae	Estimated	72 hours	Effect Concentration 10%	19.05 mg/l
Polyethylene Glycol Sorbitan Monooleate	9005-65-6	Water flea	Estimated	21 days	No obs Effect Level	10 mg/l
Solvent Dewaxed Light Paraffinic Distillates (Petroleum)	64742-56-9	Fathead Minnow	Estimated	96 hours	Lethal Level 50%	>100 mg/l
Solvent Dewaxed Light Paraffinic Distillates (Petroleum)	64742-56-9	Green algae	Estimated	72 hours	Effect Level 50%	>100 mg/l
Solvent Dewaxed Light Paraffinic Distillates (Petroleum)	64742-56-9	Water flea	Estimated	48 hours	Effect Level 50%	>100 mg/l
Solvent Dewaxed Light Paraffinic Distillates (Petroleum)	64742-56-9	Green algae	Estimated	72 hours	No obs Effect Level	>100 mg/l
Solvent Dewaxed Light Paraffinic Distillates (Petroleum)	64742-56-9	Water flea	Estimated	21 days	No obs Effect Level	>100 mg/l
Naphthalene	91-20-3	Diatom	Experimental	72 hours	Effect Concentration 50%	0.4 mg/l
Naphthalene	91-20-3	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	0.11 mg/l
Naphthalene	91-20-3	Water flea	Experimental	48 hours	Effect Concentration 50%	1.6 mg/l
Naphthalene	91-20-3	Fish other	Experimental	40 days	No obs Effect Conc	0.12 mg/l

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Tripoli	1317-95-9	Data not availbl-insufficient			N/A	

Kerosene	8008-20-6	Experimental Biodegradation	28 days	Biological Oxygen Demand	58.6 % BOD/ThBOD	OECD 301F - Manometric Respiro
Solvent dewaxed heavy paraffinic distillate (petroleum)	64742-65-0	Experimental Biodegradation	28 days	Carbon dioxide evolution	23 % weight	Other methods
Light Aromatic Hydrocarbons	64742-47-8	Estimated Biodegradation	28 days	Biological Oxygen Demand	69 % BOD/ThBOD	OECD 301F - Manometric Respiro
Oleic Acid	112-80-1	Experimental Biodegradation	28 days	Biological Oxygen Demand	78 % BOD/ThBOD	OECD 301C - MITI (I)
Pine Oil	8002-09-3	Estimated Photolysis		Photolytic half-life (in air)	124 minutes (t 1/2)	Other methods
Pine Oil	8002-09-3	Estimated Biodegradation	28 days	Biological Oxygen Demand	80 %BOD/COD	OECD 310 CO2 Headspace
Hydrotreated light paraffinic distillates (petroleum)	64742-55-8	Estimated Biodegradation	28 days	Carbon dioxide evolution	22 %CO2 evolution/THCO2 evolution	OECD 301B - Mod. Sturm or CO2
Polyethylene Glycol Sorbitan Monooleate	9005-65-6	Experimental Biodegradation	28 days	Carbon dioxide evolution	61 % weight	Other methods
Solvent Dewaxed Light Paraffinic Distillates (Petroleum)	64742-56-9	Estimated Aquatic Biodegrad. - Aerobic	28 days	Biological Oxygen Demand	31 % weight	OECD 301F - Manometric Respiro
Naphthalene	91-20-3	Experimental Biodegradation	28 days	Biological Oxygen Demand	>74 % BOD/ThBOD	OECD 301C - MITI (I)

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Tripoli	1317-95-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Kerosene	8008-20-6	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
Light Aromatic Hydrocarbons	64742-47-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

Oleic Acid	112-80-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Pine Oil	8002-09-3	Estimated Bioconcentration		Log of Octanol/H2O part. coeff	3.28	Est: Octanol-water part. coeff
Hydrotreated light paraffinic distillates (petroleum)	64742-55-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Polyethylene Glycol Sorbitan Monooleate	9005-65-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Solvent Dewaxed Light Paraffinic Distillates (Petroleum)	64742-56-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Naphthalene	91-20-3	Experimental BCF-Carp	56 days	Bioaccumulation Factor	36.5-168	OECD 305E-Bioaccum Fl-thru fis

12.4. Mobility in soil
Please contact manufacturer for more details

12.5 Other adverse effects
No information available

SECTION 13: Disposal considerations

13.1. Disposal methods

According to the Environmental Quality (Scheduled Wastes) Regulations 2005, scheduled waste has to be sent to a prescribed premise for recycling, treatment or disposal. Please approach Kualiti Alam for proper schedule waste classification and disposal.

SECTION 14: Transport Information

Not hazardous for transportation.

Marine Transport (IMDG)

UN Number: None assigned.
Proper Shipping Name: None assigned.
Technical Name: None assigned.
Hazard Class/Division: None assigned.
Subsidiary Risk: None assigned.
Packing Group: None assigned.
Limited Quantity: None assigned.
Marine Pollutant: None assigned.
Marine Pollutant Technical Name: None assigned.
Other Dangerous Goods Descriptions:
None assigned.

Air Transport (IATA)

UN Number: None assigned.
Proper Shipping Name: None assigned.
Technical Name: None assigned.
Hazard Class/Division: None assigned.
Subsidiary Risk: None assigned.
Packing Group: None assigned.
Limited Quantity: None assigned.
Marine Pollutant: None assigned.
Marine Pollutant Technical Name: None assigned.
Other Dangerous Goods Descriptions:
None assigned.

Transportation classifications are provided as a customer service. As for shipping, YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M's transportation classifications are based on product formulation, packaging, 3M policies and 3M's understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling or marking requirements. The above information is only for reference. If you are shipping by air or ocean, YOU are advised to check & meet applicable regulatory requirements.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global inventory status
Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this 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.

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