



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™ Complete Fuel System Cleaner, 08813, 38814

Product Identification Numbers

60-4550-6487-7

1.2. Recommended use and restrictions on use

Recommended use

Automotive, Clean Automotive Fuel System Components

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

Flammable Liquid: Category 3.

Aspiration Hazard: Category 1.

Carcinogenicity: Category 2.

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

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

Chronic Aquatic Toxicity: Category 2.

2.2. Label elements

Signal word

Danger

Symbols

Flame | Health Hazard | Environment |

Pictograms



Hazard Statements

H226	Flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H351	Suspected of causing cancer.
H371	May cause damage to organs: blood or blood-forming organs
H373	May cause damage to organs through prolonged or repeated exposure: blood or blood-forming organs respiratory system
H411	Toxic 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:

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233	Keep container tightly closed.
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.
P273	Avoid release to the environment.

Response:

P331	Do NOT induce vomiting.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P370 + P378G	In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Storage:

P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

Disposal:

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

May cause drowsiness or dizziness.

SECTION 3: Composition/information on ingredients

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This material is a mixture.

Ingredient	C.A.S. No.	% by Wt
KEROSENE	8008-20-6	60 - 80
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	6 - 12
POLYETHER AMINE	Trade Secret	6 - 12
SOLVENT REFINED HYDROTREATED MIDDLE DISTILLATE	64742-46-7	< 6
HYDROCARBYL AMINE	None	1 - 5
Naphthalene	91-20-3	< 2.5
Heavy Aromatic Solvent Naphtha (Petroleum)	64742-94-5	< 1.5
SUBSTITUTED ALIPHATIC AMINE	None	< 1.5

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:

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. 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:

Do not induce vomiting. Get immediate 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**

Aldehydes
Carbon monoxide
Carbon dioxide

Condition

During Combustion
During Combustion
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 metal container approved for transportation by appropriate authorities. 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. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. 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.) Wear low static or properly grounded shoes. Use personal protective equipment (gloves, respirators, etc.) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. 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
OIL MIST, MINERAL	64742-46-7	Malaysia OELs	TWA(as mist)(8 hours):5 mg/m3	

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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. Use explosion-proof ventilation 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. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

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

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state	Liquid
Color	Light Yellow
Odor	Solvent, Kerosene
Odor threshold	<i>No Data Available</i>
pH	<i>No Data Available</i>
Melting point/Freezing point	<i>No Data Available</i>
Boiling point/Initial boiling point/Boiling range	<=287.8 °C
Flash Point	>=48.9 °C [<i>Test Method: Closed Cup</i>]
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	<i>No Data Available</i>
Vapor Density and/or Relative Vapor Density	<i>No Data Available</i>
Density	0.83 g/ml
Relative Density	0.83 [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	6.04 mPa-s [Test Method: Brookfield]
Volatile Organic Compounds	88.8 % weight [Test Method: calculated per CARB title 2]
Volatile Organic Compounds	723 g/l [Test Method: calculated SCAQMD rule 443.1]
Percent volatile	87.2 % weight [Test Method: Estimated]
VOC Less H2O & Exempt Solvents	723 g/l [Test Method: calculated SCAQMD rule 443.1]

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

Sparks and/or flames

10.5. Incompatible materials

Strong acids

Strong oxidizing agents

10.6. Hazardous decomposition products**Substance****Condition**

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation:

May be harmful if inhaled.

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:

May be harmful in contact with skin.

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

Eye Contact:

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

Ingestion:

Chemical (Aspiration) Pneumonitis: Signs/symptoms may include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish colored skin (cyanosis), and may be fatal.

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

May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Blood Effects: Signs/symptoms may include generalized weakness and fatigue, skin pallor, changes in blood clotting time, internal bleeding, and/or hemoglobinemia.

Prolonged or repeated exposure may cause target organ effects:

Ocular Effects: Signs/symptoms may include blurred or significantly impaired vision.

Blood Effects: Signs/symptoms may include generalized weakness and fatigue, skin pallor, changes in blood clotting time, internal bleeding, and/or hemoglobinemia.

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

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 ATE2,000 - 5,000 mg/kg

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Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE20 - 50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
KEROSENE	Dermal	Rabbit	LD50 > 2,000 mg/kg
KEROSENE	Inhalation-Vapor (4 hours)	Rat	LC50 > 5 mg/l
KEROSENE	Ingestion	Rat	LD50 > 5,000 mg/kg
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Dermal	Rabbit	LD50 > 3,160 mg/kg
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 3 mg/l
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Ingestion	Rat	LD50 > 5,000 mg/kg
SOLVENT REFINED HYDROTREATED MIDDLE DISTILLATE	Dermal	Rabbit	LD50 > 2,000 mg/kg
SOLVENT REFINED HYDROTREATED MIDDLE DISTILLATE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 4.6 mg/l
SOLVENT REFINED HYDROTREATED MIDDLE DISTILLATE	Ingestion	Rat	LD50 > 5,000 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
Heavy Aromatic Solvent Naphtha (Petroleum)	Dermal	Rabbit	LD50 > 2,000 mg/kg
Heavy Aromatic Solvent Naphtha (Petroleum)	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
KEROSENE	Rabbit	Minimal irritation
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Rabbit	Mild irritant
SOLVENT REFINED HYDROTREATED MIDDLE DISTILLATE	Rabbit	Minimal irritation
Naphthalene	Rabbit	Minimal irritation
Heavy Aromatic Solvent Naphtha (Petroleum)	Rabbit	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
KEROSENE	Rabbit	No significant irritation
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Rabbit	Mild irritant
SOLVENT REFINED HYDROTREATED MIDDLE DISTILLATE	Not available	Mild irritant
Naphthalene	Rabbit	No significant irritation
Heavy Aromatic Solvent Naphtha (Petroleum)	Rabbit	Mild irritant

Sensitization:
Skin Sensitization

Name	Species	Value
KEROSENE	Guinea pig	Not classified
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Guinea pig	Not classified
Heavy Aromatic Solvent Naphtha (Petroleum)	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

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Name	Route	Value
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
HYDROTREATED LIGHT PETROLEUM DISTILLATES	In Vitro	Not mutagenic
SOLVENT REFINED HYDROTREATED MIDDLE DISTILLATE	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
KEROSENE	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
SOLVENT REFINED HYDROTREATED MIDDLE DISTILLATE	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Naphthalene	Inhalation	Multiple animal species	Carcinogenic
Heavy Aromatic Solvent Naphtha (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
KEROSENE	Dermal	Not classified for female reproduction	Rat	NOAEL 494 mg/kg/day	pre mating & during gestation
KEROSENE	Dermal	Not classified for male reproduction	Rat	NOAEL 494 mg/kg/day	pre mating & during gestation
KEROSENE	Dermal	Not classified for development	Rat	NOAEL 494 mg/kg/day	pre mating & during gestation
KEROSENE	Inhalation	Not classified for development	Rat	NOAEL 400 ppm	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 hematopoietic system	Not classified	Human	NOAEL not available	poisoning and/or abuse
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
HYDROTREATED LIGHT PETROLEUM	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for		NOAEL Not available	

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DISTILLATES			classification			
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Notavailable	
SOLVENT REFINED HYDROTREATED MIDDLE DISTILLATE	Inhalation	central nervous system depression respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Not available	NOAEL NA	
SOLVENT REFINED HYDROTREATED MIDDLE DISTILLATE	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Not available	NOAEL NA	
Naphthalene	Ingestion	blood	Causes damage to organs	Human	NOAEL Not available	poisoning and/or abuse
Heavy Aromatic Solvent Naphtha (Petroleum)	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Heavy Aromatic Solvent Naphtha (Petroleum)	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Professional judgement	NOAEL Not available	
Heavy Aromatic Solvent Naphtha (Petroleum)	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
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
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 available	occupational 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

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Name	Value
KEROSENE	Aspiration hazard
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Aspiration hazard
SOLVENT REFINED HYDROTREATED MIDDLE DISTILLATE	Aspiration hazard
Heavy Aromatic Solvent Naphtha (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 2: Toxic to aquatic life.

Chronic aquatic hazard:

GHS Chronic 2: Toxic to aquatic life with long lasting effects

No product test data available

Material	Cas #	Organism	Type	Exposure	Test Endpoint	Test Result
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
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	Green Algae	Estimated	72 hours	Effect Concentration 50%	1 mg/l
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	Rainbow Trout	Estimated	96 hours	Lethal Level 50%	2 mg/l
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	Water flea	Estimated	48 hours	Effect Level 50%	1.4 mg/l
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	Green Algae	Estimated	72 hours	No obs Effect Level	1 mg/l
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	Water flea	Estimated	21 days	No obs Effect Level	0.48 mg/l

TED LIGHT PETROLEUM DISTILLATES					Level	
SOLVENT REFINED HYDROTREA TED MIDDLE DISTILLATE	64742-46-7		Data not available or insufficient for classification			
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
Heavy Aromatic Solvent Naphtha (Petroleum)	64742-94-5	Green Algae	Experimental	72 hours	Effect Level 50%	11 mg/l
Heavy Aromatic Solvent Naphtha (Petroleum)	64742-94-5	Rainbow Trout	Experimental	96 hours	Lethal Level 50%	2 mg/l
Heavy Aromatic Solvent Naphtha (Petroleum)	64742-94-5	Water flea	Experimental	48 hours	Effect Level 50%	3 mg/l
Heavy Aromatic Solvent Naphtha (Petroleum)	64742-94-5	Green Algae	Experimental	72 hours	No obs Effect Level	2.5 mg/l

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
KEROSENE	8008-20-6	Experimental Biodegradation	28 days	Biological Oxygen Demand	58.6 % BOD/ThBOD	OECD 301F - Manometric Respiro
HYDROTREA TED LIGHT PETROLEUM DISTILLATES	64742-47-8	Data not availbl- insufficient			N/A	
SOLVENT REFINED HYDROTREA TED MIDDLE DISTILLATE	64742-46-7	Estimated Photolysis		Photolytic half- life (in air)	<2.45 days (t 1/2)	Other methods

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Naphthalene	91-20-3	Experimental Biodegradation	28 days	Biological Oxygen Demand	>74 % BOD/ThBOD	OECD 301C - MITI (I)
Heavy Aromatic Solvent Naphtha (Petroleum)	64742-94-5	Estimated Photolysis		Photolytic half-life (in air)	<2.06 days (t _{1/2})	Other methods
Heavy Aromatic Solvent Naphtha (Petroleum)	64742-94-5	Estimated Biodegradation	28 days	Biological Oxygen Demand	58 % BOD/ThBOD	OECD 301F - Manometric Respiro

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
KEROSENE	8008-20-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
SOLVENT REFINED HYDROTREATED MIDDLE DISTILLATE	64742-46-7	Estimated Bioconcentration		Log of Octanol/H ₂ O part. coeff	>4.61	Est: Octanol-water part. coeff
Naphthalene	91-20-3	Experimental BCF-Carp	56 days	Bioaccumulation Factor	36.5-168	OECD 305E-Bioaccum FI-thru fis
Heavy Aromatic Solvent Naphtha (Petroleum)	64742-94-5	Experimental Bioconcentration		Log of Octanol/H ₂ O part. coeff	4.4	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

Marine Transport (IMDG)

UN Number:UN1223
Proper Shipping Name:KEROSENE
Technical Name:None assigned.
Hazard Class/Division:3
Subsidiary Risk:None assigned.
Packing Group:III
Limited Quantity:Yes
Marine Pollutant: None assigned.
Marine Pollutant Technical Name: None assigned.
Other Dangerous Goods Descriptions:
None assigned.

Air Transport (IATA)

UN Number:UN1223
Proper Shipping Name:KEROSENE
Technical Name:None assigned.
Hazard Class/Division:3
Subsidiary Risk:None assigned.
Packing Group:III
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 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