



## 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 (TM) Perfect-it III Fast Cut Compound 09374

#### Product Identification Numbers

UU-0052-6457-5      UU-0055-4326-7      UU-0063-8346-5      UU-0108-7966-4      UU-0116-2985-2

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

##### Recommended use

Automotive, For removal of P1500 or finer sanding scratches on automotive refinish clear coat paint with the use of appropriate compounding pads and rotary polisher

#### 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.

Skin Sensitizer: Category 1.

Specific Target Organ Toxicity (repeated exposure): Category 1.

Chronic Aquatic Toxicity: Category 3.

#### 2.2. Label elements

##### Signal word

Danger

##### Symbols

Flame | Exclamation mark | Health Hazard |

**Pictograms****Hazard Statements:**

H226	Flammable liquid and vapor.
H317	May cause an allergic skin reaction.
H372	Causes damage to organs through prolonged or repeated exposure: nervous system.
H412	Harmful to aquatic life with long lasting effects.

**Precautionary statements****Prevention:**

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P280E	Wear protective gloves.

**Response:**

P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P370 + P378	In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

**Disposal:**

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

Aspiration classification does not apply due to the viscosity of the product., May cause drowsiness or dizziness., Persons previously sensitized to amines may develop a cross-sensitization reaction to certain other amines.

## SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	30 - 40
Water	7732-18-5	30 - 40
Aluminum Oxide (non-fibrous)	1344-28-1	25 - 30
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	9005-65-6	3 - 7
White mineral oil (petroleum)	8042-47-5	< 3
1,2,4-TRIMETHYLBENZENE	95-63-6	< 2
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	None	< 1.5
MALEIC ANHYDRIDE	108-31-6	< 0.01

## 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:

Rinse mouth. If you feel unwell, get medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

Allergic skin reaction (redness, swelling, blistering, and itching). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness). Target organ effects following prolonged or repeated exposure. See Section 11 for additional details.

### 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

<u>Substance</u>	<u>Condition</u>
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. Cover spill area with a fire extinguishing foam that is resistant to polar solvents. 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. 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

Avoid breathing of dust created by cutting, sanding, grinding or machining. 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. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. 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
MALEIC ANHYDRIDE	108-31-6	ACGIH	TWA(inhalable fraction and vapor):0.01 mg/m <sup>3</sup>	A4: Not class. as human carcin, Dermal/Respiratory Sensitizer
MALEIC ANHYDRIDE	108-31-6	Malaysia OELs	TWA(8 hours):1 mg/m <sup>3</sup> (0.25 ppm)	
Aluminum Oxide (non-fibrous)	1344-28-1	Malaysia OELs	TWA (proposed)(8 hours):10 mg/m <sup>3</sup>	
Aluminum, insoluble compounds	1344-28-1	ACGIH	TWA(respirable fraction):1 mg/m <sup>3</sup>	A4: Not class. as human carcin
Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles	1344-28-1	ACGIH	TWA(inhalable particulates):10 mg/m <sup>3</sup>	
Particles (insoluble or poorly soluble) not otherwise specified, respirable particles	1344-28-1	ACGIH	TWA(respirable particles):3 mg/m <sup>3</sup>	

Stoddard solvent	64742-82-1	ACGIH	TWA:100 ppm	
Stoddard solvent	64742-82-1	Malaysia OELs	TWA(8 hours):525 mg/m <sup>3</sup> (100 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>	
1,2,4-TRIMETHYLBENZENE	95-63-6	ACGIH	TWA:10 ppm	A4: Not class. as human carcin

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

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:  
Safety Glasses with side shields

#### Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended: Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - 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
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<b>Specific Physical Form:</b>	Viscous
<b>Color</b>	White
<b>Odor</b>	Paraffinic
<b>Odor threshold</b>	No Data Available
<b>pH</b>	7.4 - 7.8
<b>Melting point/Freezing point</b>	Not Applicable
<b>Boiling point/Initial boiling point/Boiling range</b>	No Data Available
<b>Flash Point</b>	60 °C [Test Method:Pensky-Martens Closed Cup] [Details:BS EN 456]
<b>Evaporation rate</b>	No Data Available
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Flammable Limits(LEL)</b>	No Data Available
<b>Flammable Limits(UEL)</b>	No Data Available
<b>Vapor Pressure</b>	No Data Available
<b>Vapor Density and/or Relative Vapor Density</b>	No Data Available
<b>Density</b>	1.1 - 1.14 g/ml
<b>Relative Density</b>	1.1 - 1.14 [Ref Std:WATER=1]
<b>Water solubility</b>	No Data Available
<b>Solubility- non-water</b>	No Data Available
<b>Partition coefficient: n-octanol/ water</b>	No Data Available
<b>Autoignition temperature</b>	No Data Available
<b>Decomposition temperature</b>	No Data Available
<b>Viscosity/Kinematic Viscosity</b>	44,000 - 53,000 mPa-s
<b>Volatile Organic Compounds</b>	30.7 %
<b>Percent volatile</b>	64.47 % weight [Test Method:Estimated] [Details:EU definition]
<b>VOC Less H2O &amp; Exempt Solvents</b>	No Data Available

## 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

Sparks and/or flames

High shear and high temperature conditions

### 10.5. Incompatible materials

Alkali and alkaline earth metals

Strong acids

### 10.6. Hazardous decomposition products

#### Substance

None known.

#### Condition

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.

Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

##### Skin Contact:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

##### 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:

##### 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.

##### Prolonged or repeated exposure may cause target organ effects:

Central Neuropathy: Signs/symptoms may include irritability, memory impairment, personality changes, sleep disorders, and decreased ability to concentrate.

#### Additional Information:

Persons previously sensitized to amines may develop a cross-sensitization reaction to certain other amines.

#### 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
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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
Naphtha (petroleum), hydrodesulfurized heavy	Dermal	Rat	LD50 > 3,400 mg/kg
Naphtha (petroleum), hydrodesulfurized heavy	Inhalation-Vapor (4 hours)	Rat	LC50 > 16.2 mg/l
Naphtha (petroleum), hydrodesulfurized heavy	Ingestion	Rat	LD50 > 15,000 mg/kg
Aluminum Oxide (non-fibrous)	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminum Oxide (non-fibrous)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Aluminum Oxide (non-fibrous)	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
White mineral oil (petroleum)	Dermal	Rabbit	LD50 > 2,000 mg/kg
White mineral oil (petroleum)	Ingestion	Rat	LD50 > 5,000 mg/kg
1,2,4-TRIMETHYLBENZENE	Dermal	Rabbit	LD50 > 3,160 mg/kg
1,2,4-TRIMETHYLBENZENE	Inhalation-Vapor (4 hours)	Rat	LC50 18 mg/l
1,2,4-TRIMETHYLBENZENE	Ingestion	Rat	LD50 3,400 mg/kg
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	Ingestion	Rat	LD50 > 5,385 mg/kg
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	Dermal	similar health hazards	LD50 estimated to be > 5,000 mg/kg
MALEIC ANHYDRIDE	Dermal	Rabbit	LD50 2,620 mg/kg
MALEIC ANHYDRIDE	Ingestion	Rat	LD50 1,030 mg/kg

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

Name	Species	Value
Naphtha (petroleum), hydrodesulfurized heavy	Rabbit	Minimal irritation
Aluminum Oxide (non-fibrous)	Rabbit	No significant irritation
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	Rabbit	No significant irritation
White mineral oil (petroleum)	Rabbit	No significant irritation
1,2,4-TRIMETHYLBENZENE	Rabbit	Irritant
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	Rabbit	No significant irritation
MALEIC ANHYDRIDE	Human and animal	Corrosive

### Serious Eye Damage/Irritation

Name	Species	Value
Naphtha (petroleum), hydrodesulfurized heavy	Rabbit	No significant irritation
Aluminum Oxide (non-fibrous)	Rabbit	No significant irritation
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	Rabbit	No significant irritation
White mineral oil (petroleum)	Rabbit	Mild irritant
1,2,4-TRIMETHYLBENZENE	Rabbit	Mild irritant
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	Rabbit	No significant irritation
MALEIC ANHYDRIDE	Rabbit	Corrosive

### Sensitization:



**Skin Sensitization**

Name	Species	Value
Naphtha (petroleum), hydrosulfurized heavy	Guinea pig	Not classified
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	Guinea pig	Not classified
White mineral oil (petroleum)	Guinea pig	Not classified
1,2,4-TRIMETHYLBENZENE	Guinea pig	Not classified
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	Mouse	Sensitizing
MALEIC ANHYDRIDE	Multiple animal species	Sensitizing

**Respiratory Sensitization**

Name	Species	Value
MALEIC ANHYDRIDE	Human	Sensitizing

**Germ Cell Mutagenicity**

Name	Route	Value
Aluminum Oxide (non-fibrous)	In Vitro	Not mutagenic
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	In Vitro	Not mutagenic
White mineral oil (petroleum)	In Vitro	Not mutagenic
1,2,4-TRIMETHYLBENZENE	In Vitro	Not mutagenic
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	In Vitro	Not mutagenic
MALEIC ANHYDRIDE	In vivo	Not mutagenic
MALEIC ANHYDRIDE	In Vitro	Some positive data exist, but the data are not sufficient for classification

**Carcinogenicity**

Name	Route	Species	Value
Aluminum Oxide (non-fibrous)	Inhalation	Rat	Not carcinogenic
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	Ingestion	Rat	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

**Reproductive Toxicity****Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
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
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
1,2,4-TRIMETHYLBENZENE	Inhalation	Not classified for female reproduction	Rat	NOAEL 1.2 mg/l	3 months
1,2,4-TRIMETHYLBENZENE	Inhalation	Not classified for male reproduction	Rat	NOAEL 1.2 mg/l	3 months
1,2,4-TRIMETHYLBENZENE	Inhalation	Not classified for development	Rat	NOAEL 1.5 mg/l	during gestation
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating into lactation
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	28 days
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	gestation into lactation
MALEIC ANHYDRIDE	Ingestion	Not classified for female reproduction	Rat	NOAEL 55 mg/kg/day	2 generation
MALEIC ANHYDRIDE	Ingestion	Not classified for male reproduction	Rat	NOAEL 55 mg/kg/day	2 generation
MALEIC ANHYDRIDE	Ingestion	Not classified for development	Rat	NOAEL 140 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
Naphtha (petroleum), hydrodesulfurized heavy	Inhalation	central nervous system depression	May cause drowsiness or dizziness	similar compounds	NOAEL not available	
Naphtha (petroleum), hydrodesulfurized heavy	Ingestion	central nervous system depression	May cause drowsiness or dizziness	similar compounds	NOAEL not available	
1,2,4-TRIMETHYLBENZENE	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
1,2,4-TRIMETHYLBENZENE	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	
1,2,4-TRIMETHYLBENZENE	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
MALEIC ANHYDRIDE	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	

#### Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Naphtha (petroleum), hydrodesulfurized heavy	Inhalation	central nervous system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL not available	occupational exposure
Aluminum Oxide (non-fibrous)	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Aluminum Oxide (non-fibrous)	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	Ingestion	heart   endocrine system   gastrointestinal tract   bone, teeth, nails,	Not classified	Rat	NOAEL 4,132 mg/kg/day	90 days

		and/or hair   hematopoietic system   liver   immune system   nervous system   kidney and/or bladder   respiratory system				
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
1,2,4-TRIMETHYLBENZENE	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.5 mg/l	3 months
1,2,4-TRIMETHYLBENZENE	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.1 mg/l	3 months
1,2,4-TRIMETHYLBENZENE	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
1,2,4-TRIMETHYLBENZENE	Inhalation	liver   kidney and/or bladder   heart   endocrine system   gastrointestinal tract   immune system	Not classified	Rat	NOAEL 1.2 mg/l	3 months
1,2,4-TRIMETHYLBENZENE	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 600 mg/kg/day	14 days
1,2,4-TRIMETHYLBENZENE	Ingestion	liver   immune system   kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	Ingestion	hematopoietic system   heart   endocrine system   gastrointestinal tract   bone, teeth, nails, and/or hair   liver   immune system   muscles   nervous system   eyes   kidney and/or bladder   respiratory system	Not classified	Rat	NOAEL 1,000 mg/kg/day	35 days
MALEIC ANHYDRIDE	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.0011 mg/l	6 months
MALEIC ANHYDRIDE	Inhalation	endocrine system   hematopoietic system   nervous system   kidney and/or bladder   heart   liver   eyes	Not classified	Rat	NOAEL 0.0098 mg/l	6 months
MALEIC ANHYDRIDE	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 55 mg/kg/day	80 days
MALEIC ANHYDRIDE	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 250 mg/kg/day	183 days
MALEIC ANHYDRIDE	Ingestion	heart   nervous system	Not classified	Rat	NOAEL 600 mg/kg/day	183 days
MALEIC ANHYDRIDE	Ingestion	gastrointestinal tract	Not classified	Rat	NOAEL 150 mg/kg/day	80 days
MALEIC ANHYDRIDE	Ingestion	hematopoietic system	Not classified	Dog	NOAEL 60 mg/kg/day	90 days
MALEIC ANHYDRIDE	Ingestion	skin   endocrine system   immune system   eyes	Not classified	Rat	NOAEL 150 mg/kg/day	80 days

		respiratory system				
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**Aspiration Hazard**

Name	Value
Naphtha (petroleum), hydrodesulfurized heavy	Aspiration hazard
White mineral oil (petroleum)	Aspiration hazard
1,2,4-TRIMETHYLBENZENE	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 3: Harmful to aquatic life with long lasting effects

No product test data available

Material	Cas #	Organism	Type	Exposure	Test Endpoint	Test Result
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	Green algae	Estimated	72 hours	EL50	4.1 mg/l
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	Rainbow Trout	Estimated	96 hours	LL50	30 mg/l
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	Water flea	Estimated	48 hours	EL50	22 mg/l
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	Green algae	Estimated	72 hours	NOEL	0.76 mg/l
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	Water flea	Estimated	21 days	EC10	0.879 mg/l
Aluminum Oxide (non-fibrous)	1344-28-1	N/A	Experimental	96 hours	LC50	>100 mg/l
Aluminum Oxide (non-fibrous)	1344-28-1	Green algae	Experimental	72 hours	EC50	>100 mg/l
Aluminum Oxide (non-fibrous)	1344-28-1	Water flea	Experimental	48 hours	LC50	>100 mg/l
Aluminum Oxide (non-fibrous)	1344-28-1	Green algae	Experimental	72 hours	NOEC	>100 mg/l
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	9005-65-6	Green algae	Analogous Compound	72 hours	EL50	58.84 mg/l

POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	9005-65-6	Zebra Fish	Analogous Compound	96 hours	LL50	>100 mg/l
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	9005-65-6	Green algae	Analogous Compound	72 hours	EL10	19.05 mg/l
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	9005-65-6	Water flea	Analogous Compound	21 days	NOEL	10 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 (petroleum)	8042-47-5	Water flea	Analogous Compound	21 days	NOEL	>100 mg/l
1,2,4- TRIMETHYLBEN ZENE	95-63-6	Fathead Minnow	Experimental	96 hours	LC50	7.72 mg/l
1,2,4- TRIMETHYLBEN ZENE	95-63-6	Mysid Shrimp	Experimental	96 hours	LC50	2 mg/l
1,2,4- TRIMETHYLBEN ZENE	95-63-6	Water flea	Experimental	48 hours	EC50	3.6 mg/l
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	None	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	None	Green algae	Experimental	72 hours	EL50	105 mg/l
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	None	Rainbow Trout	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	None	Water flea	Experimental	48 hours	No tox obs at lmt of water sol	>100 mg/l
Condensation products of triethanolamine with addition	None	Green algae	Experimental	72 hours	EL10	40 mg/l

products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride						
MALEIC ANHYDRIDE	108-31-6	Bacteria	Experimental	18 hours	EC10	44.6 mg/l
MALEIC ANHYDRIDE	108-31-6	Rainbow Trout	Experimental	96 hours	LC50	75 mg/l
MALEIC ANHYDRIDE	108-31-6	Green algae	Hydrolysis Product	72 hours	ErC50	74.4 mg/l
MALEIC ANHYDRIDE	108-31-6	Water flea	Hydrolysis Product	48 hours	EC50	93.8 mg/l
MALEIC ANHYDRIDE	108-31-6	Water flea	Experimental	21 days	NOEC	10 mg/l
MALEIC ANHYDRIDE	108-31-6	Green algae	Hydrolysis Product	72 hours	ErC10	11.8 mg/l

## 12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	Estimated Biodegradation	28 days	Biological Oxygen Demand	74.7 %BOD/ThOD	OECD 301F - Manometric Respiro
Aluminum Oxide (non-fibrous)	1344-28-1	Data not availbl-insufficient	N/A	N/A	N/A	N/A
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	9005-65-6	Experimental Biodegradation	28 days	Carbon dioxide evolution	61 %CO2 evolution/THCO2 evolution	ISO 14593 Inorg C Headspace
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
1,2,4-TRIMETHYLBENZENE	95-63-6	Experimental Biodegradation	28 days	Biological Oxygen Demand	>60 %BOD/ThOD	OECD 301F - Manometric Respiro
1,2,4-TRIMETHYLBENZENE	95-63-6	Experimental Photolysis		Photolytic half-life (in air)	11.8 hours (t 1/2)	
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	None	Experimental Biodegradation	28 days	Biological Oxygen Demand	23 %BOD/ThOD	OECD 301F - Manometric Respiro
MALEIC ANHYDRIDE	108-31-6	Hydrolysis product Biodegradation	25 days	Carbon dioxide evolution	>90 %CO2 evolution/THCO2 evolution	OECD 301B - Mod. Sturm or CO2
MALEIC ANHYDRIDE	108-31-6	Experimental Hydrolysis		Hydrolytic half-life	0.37 minutes (t 1/2)	

## 12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

Aluminum Oxide (non-fibrous)	1344-28-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	9005-65-6	Modeled Bioconcentration		Bioaccumulation Factor	5	Catalogic™
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	9005-65-6	Modeled Bioconcentration		Log of Octanol/H2O part. coeff	5.61	Episuite™
White mineral oil (petroleum)	8042-47-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
1,2,4-TRIMETHYLBENZENE	95-63-6	Experimental BCF - Fish	56 days	Bioaccumulation Factor	≤275	OECD305-Bioconcentration
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	None	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	< 1	OECD 117 log Kow HPLC method
MALEIC ANHYDRIDE	108-31-6	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	-2.61	OECD 107 log Kow shke flask mtd

#### 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:**UN1263

**Proper Shipping Name:**PAINTS

**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:**UN1263**Proper Shipping Name:**PAINTS**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**

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.

**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.

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