Safety Data Sheet

Document Group:	22-4541-3	**Version Number:**	4.00
Issue Date:	15/11/2019	**Supercedes Date:**	26/02/2019

This Safety Data Sheet has been prepared in accordance with the Malaysia Occupational Safety and Health (Chemical Classification, Labelling and Safety Data Sheets) Regulations 2013.

SECTION 1: Identification

1.1. Product identifier
3M Perfect-It III Fast Cut Plus Compound 50417

Product Identification Numbers

GC-8010-0577-5	GC-8010-0692-2	GC-8010-0693-0	GC-8010-1481-9	GC-8010-1863-8
GC-8010-1864-6	GC-8010-1865-3	GC-8010-2249-9	GC-8010-2861-1	GC-8010-2862-9
GT-6000-1890-4	UU-0015-6471-3	UU-0016-6337-4	UU-0042-3165-8	UU-0055-4323-4
UU-0055-4324-2	XA-0046-8045-1	XA-0046-8047-7	XA-0046-8049-3	XA-0046-8060-0
XA-0046-8064-2	XA-0046-9962-6	XW-0049-0314-2		

1.2. Recommended use and restrictions on use

Recommended use
Automotive, Polish for use with the appropriate compounding buffs and rotary polisher in the removal of finer sanding scratches during rectification of automotive refinish clear coat paint.

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
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

H372	Causes damage to organs through prolonged or repeated exposure: nervous system |
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements
General:

P102	Keep out of reach of children.

Prevention:

P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P280B	Wear protective gloves and eye/face protection.

Disposal:

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

2.3. Other hazards
Repeated exposure may cause skin dryness or cracking.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt
NON-HAZARDOUS INGREDIENTS	Mixture	30 - 60
Aluminum Oxide (non-fibrous)	1344-28-1	10 - 30
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	10 - 20
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	7 - 13
GLYCERIN	56-81-5	1 - 5
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	64742-94-5	1 - 5
WHITE MINERAL OIL (PETROLEUM)	8042-47-5	1 - 5
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	Trade Secret	1 - 5
Castor oil	8001-79-4	1 - 3
1,2-BENZISOTHIAZOLIN-3-ONE	2634-33-5	< 0.05

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
Hydrocarbons	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

5.3. Special protective actions for fire-fighters
Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions
Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep out of reach of children. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities

Keep cool. Store away from heat. Store away from acids. Store away from oxidizing agents. Store away from areas where product may come into contact with food or pharmaceuticals.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Aluminum Oxide (non-fibrous)	1344-28-1	Malaysia OELs	TWA (proposed)(8 hours):10 mg/m3	
Aluminum, insoluble compounds	1344-28-1	ACGIH	TWA(respirable fraction):1 mg/m3	A4: Not class. as human carcin
GLYCERIN	56-81-5	Malaysia OELs	TWA(as mist)(8 hours):10 mg/m3	
Kerosine (petroleum)	64742-47-8	ACGIH	TWA(as total hydrocarbon vapor, non-aerosol):200 mg/m3	A3: Confirmed animal carcin., SKIN

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. Provide appropriate local exhaust ventilation for cutting, grinding, sanding or machining.

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
No chemical protective gloves are required.

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:	Slurry
Color	White
Odor	Paraffinic
Odor threshold	*No Data Available*
pH	7.5 - 9
Melting point/Freezing point	*Not Applicable*
Boiling point/Initial boiling point/Boiling range	> 65 ºC
Flash Point	>=65 ºC [*Test Method:*Pensky-Martens Closed Cup]
Evaporation rate	*Not Applicable*
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	*No Data Available*
Flammable Limits(UEL)	*No Data Available*
Vapor Pressure	*No Data Available*
Vapor Density	*No Data Available*
Density	1.15 g/ml
Relative Density	1.15 [*Ref Std:*WATER=1]
Water solubility	*No Data Available*
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	30 - 45 Pa-s
Volatile Organic Compounds	20.88 %
Percent volatile	28 %
VOC Less H2O & Exempt Solvents	26 %

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
High shear and high temperature conditions
Sparks and/or flames

10.5. Incompatible materials
Alkali and alkaline earth metals
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.

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 target organ effects after inhalation. May cause additional health effects (see below).

Skin Contact:
Dermal Defatting: Signs/symptoms may include localized redness, itching, drying and cracking of skin.

Eye Contact:
Contact with the eyes during product use is not expected to result in significant irritation. 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:
Central Neuropathy: Signs/symptoms may include irritability, memory impairment, personality changes, sleep disorders, and decreased ability to concentrate.

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

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
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
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
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Inhalation-Vapor	Professional judgement	LC50 estimated to be 20 - 50 mg/l
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Dermal	Rabbit	LD50 > 5,000 mg/kg
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Ingestion	Rat	LD50 > 5,000 mg/kg
WHITE MINERAL OIL (PETROLEUM)	Dermal	Rabbit	LD50 > 2,000 mg/kg
WHITE MINERAL OIL (PETROLEUM)	Ingestion	Rat	LD50 > 5,000 mg/kg
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
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Inhalation-Vapor	Professional judgement	LC50 estimated to be 20 - 50 mg/l
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Dermal	Rabbit	LD50 > 2,000 mg/kg
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Ingestion	Rat	LD50 > 5,000 mg/kg
GLYCERIN	Dermal	Rabbit	LD50 estimated to be > 5,000 mg/kg
GLYCERIN	Ingestion	Rat	LD50 > 5,000 mg/kg
Castor oil	Dermal		LD50 estimated to be > 5,000
Castor oil	Ingestion		LD50 estimated to be > 5,000
1,2-BENZISOTHIAZOLIN-3-ONE	Dermal	Rat	LD50 > 2,000 mg/kg
1,2-BENZISOTHIAZOLIN-3-ONE	Ingestion	Rat	LD50 454 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Aluminum Oxide (non-fibrous)	Rabbit	No significant irritation
Naphtha (petroleum), hydrodesulfurized heavy	Rabbit	Minimal irritation
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Rabbit	Minimal irritation
WHITE MINERAL OIL (PETROLEUM)	Rabbit	No significant irritation
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	Rabbit	No significant irritation

HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Rabbit	Minimal irritation
GLYCERIN	Rabbit	No significant irritation
Castor oil	Human	Minimal irritation
1,2-BENZISOTHIAZOLIN-3-ONE	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Aluminum Oxide (non-fibrous)	Rabbit	No significant irritation
Naphtha (petroleum), hydrodesulfurized heavy	Rabbit	No significant irritation
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Rabbit	Mild irritant
WHITE MINERAL OIL (PETROLEUM)	Rabbit	Mild irritant
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	Rabbit	No significant irritation
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Rabbit	Mild irritant
GLYCERIN	Rabbit	No significant irritation
Castor oil	Rabbit	Mild irritant
1,2-BENZISOTHIAZOLIN-3-ONE	Rabbit	Corrosive

Skin Sensitization

Name	Species	Value
Naphtha (petroleum), hydrodesulfurized heavy	Guinea pig	Not classified
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Guinea pig	Not classified
WHITE MINERAL OIL (PETROLEUM)	Guinea pig	Not classified
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	Guinea pig	Not classified
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Guinea pig	Not classified
GLYCERIN	Guinea pig	Not classified
Castor oil	Human	Not classified
1,2-BENZISOTHIAZOLIN-3-ONE	Guinea pig	Sensitizing

Respiratory Sensitization

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

Germ Cell Mutagenicity

Name	Route	Value
Aluminum Oxide (non-fibrous)	In Vitro	Not mutagenic
HYDROTREATED LIGHT PETROLEUM DISTILLATES	In Vitro	Not mutagenic
HYDROTREATED LIGHT PETROLEUM DISTILLATES	In vivo	Not mutagenic
WHITE MINERAL OIL (PETROLEUM)	In Vitro	Not mutagenic
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	In Vitro	Not mutagenic
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	In Vitro	Not mutagenic
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	In vivo	Not mutagenic
Castor oil	In Vitro	Not mutagenic
Castor oil	In vivo	Not mutagenic
1,2-BENZISOTHIAZOLIN-3-ONE	In vivo	Not mutagenic
1,2-BENZISOTHIAZOLIN-3-ONE	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
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Not Specified	Not available	Not carcinogenic
WHITE MINERAL OIL (PETROLEUM)	Dermal	Mouse	Not carcinogenic
WHITE MINERAL OIL (PETROLEUM)	Inhalation	Multiple	Not carcinogenic

		animal species	
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
GLYCERIN	Ingestion	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
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Not Specified	Not classified for female reproduction	Rat	NOAEL Not available	1 generation
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Not Specified	Not classified for male reproduction	Rat	NOAEL Not available	1 generation
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Not Specified	Not classified for development	Rat	NOAEL Not available	1 generation
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
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
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Not Specified	Not classified for female reproduction	Rat	NOAEL Not available	2 generation
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Not Specified	Not classified for male reproduction	Rat	NOAEL Not available	2 generation
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Not Specified	Not classified for development	Rat	NOAEL Not available	2 generation
GLYCERIN	Ingestion	Not classified for female reproduction	Rat	NOAEL 2,000 mg/kg/day	2 generation
GLYCERIN	Ingestion	Not classified for male reproduction	Rat	NOAEL 2,000 mg/kg/day	2 generation
GLYCERIN	Ingestion	Not classified for development	Rat	NOAEL 2,000 mg/kg/day	2 generation
1,2-BENZISOTHIAZOLIN-3-ONE	Ingestion	Not classified for female reproduction	Rat	NOAEL 112 mg/kg/day	2 generation
1,2-BENZISOTHIAZOLIN-3-ONE	Ingestion	Not classified for male reproduction	Rat	NOAEL 112 mg/kg/day	2 generation
1,2-BENZISOTHIAZOLIN-3-ONE	Ingestion	Not classified for development	Rat	NOAEL 112 mg/kg/day	2 generation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
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 compoun ds	NOAEL not available	
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
1,2-BENZISOTHIAZOLIN-3-ONE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
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
Naphtha (petroleum), hydrodesulfurized heavy	Inhalation	central nervous system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL not available	occupational exposure
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
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
GLYCERIN	Inhalation	respiratory system | heart | liver | kidney and/or bladder	Not classified	Rat	NOAEL 3.91 mg/l	14 days
GLYCERIN	Ingestion	endocrine system | hematopoietic system | liver | kidney and/or bladder	Not classified	Rat	NOAEL 10,000 mg/kg/day	2 years
Castor oil	Ingestion	heart | hematopoietic system | liver	Not classified	Rat	NOAEL 4,800 mg/kg/day	13 weeks
Castor oil	Ingestion	kidney and/or bladder	Not classified	Mouse	NOAEL 13,000 mg/kg/day	13 weeks
1,2-BENZISOTHIAZOLIN-3-ONE	Ingestion	liver | hematopoietic system | eyes | kidney and/or bladder | respiratory system	Not classified	Rat	NOAEL 322 mg/kg/day	90 days
1,2-BENZISOTHIAZOLIN-3-ONE	Ingestion	heart | endocrine system | nervous system	Not classified	Rat	NOAEL 150 mg/kg/day	28 days

Aspiration Hazard

Name	Value
Naphtha (petroleum), hydrodesulfurized heavy	Aspiration hazard
HYDROTREATED LIGHT PETROLEUM DISTILLATES	Aspiration hazard
WHITE MINERAL OIL (PETROLEUM)	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 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
Aluminum Oxide (non-fibrous)	1344-28-1		Experimental	96 hours	Lethal Concentration 50%	>100 mg/l
Aluminum Oxide (non-fibrous)	1344-28-1	Green algae	Experimental	72 hours	Effect Concentration 50%	>100 mg/l
Aluminum Oxide (non-fibrous)	1344-28-1	Water flea	Experimental	48 hours	Lethal Concentration 50%	>100 mg/l
Aluminum Oxide (non-fibrous)	1344-28-1	Green algae	Experimental	72 hours	No obs Effect Conc	>100 mg/l
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	Green Algae	Estimated	72 hours	Effect Level 50%	4.1 mg/l
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	Rainbow Trout	Estimated	96 hours	Lethal Level 50%	30 mg/l
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	Water flea	Estimated	48 hours	Effect Level 50%	22 mg/l
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	Green Algae	Estimated	72 hours	No obs Effect Level	0.76 mg/l
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	Water flea	Estimated	21 days	Effect Concentration 10%	0.879 mg/l

HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	Green Algae	Experimental	72 hours	Effect Level 50%	>1,000 mg/l
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	Rainbow Trout	Experimental	96 hours	Lethal Level 50%	>1,000 mg/l
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	Water flea	Experimental	48 hours	Effect Level 50%	>1,000 mg/l
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	Green Algae	Experimental	72 hours	No obs Effect Level	1,000 mg/l
GLYCERIN	56-81-5	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	54,000 mg/l
GLYCERIN	56-81-5	Water flea	Experimental	48 hours	Lethal Concentration 50%	1,955 mg/l
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	64742-94-5	Green Algae	Estimated	72 hours	Effect Level 50%	1 mg/l
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	64742-94-5	Rainbow Trout	Estimated	96 hours	Lethal Level 50%	2 mg/l
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	64742-94-5	Water flea	Estimated	48 hours	Effect Level 50%	3 mg/l
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	64742-94-5	Green Algae	Estimated	72 hours	No obs Effect Level	1 mg/l
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	Trade Secret	Copepods	Estimated	48 hours	Lethal Level 50%	>10,000 mg/l
POLYETHYLENE GLYCOL SORBITAN MONOOLEAT	Trade Secret	Green Algae	Estimated	72 hours	Effect Level 50%	58.84 mg/l

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POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	Trade Secret	Zebra Fish	Estimated	96 hours	Lethal Concentration 50%	>100 mg/l
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	Trade Secret	Green Algae	Estimated	72 hours	Effect Concentration 10%	19.05 mg/l
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	Trade Secret	Water flea	Estimated	21 days	No obs Effect Level	10 mg/l
WHITE MINERAL OIL (PETROLEUM)	8042-47-5	Water flea	Estimated	48 hours	Effect Level 50%	>100 mg/l
WHITE MINERAL OIL (PETROLEUM)	8042-47-5	Bluegill	Experimental	96 hours	Lethal Level 50%	>100 mg/l
WHITE MINERAL OIL (PETROLEUM)	8042-47-5	Green algae	Estimated	72 hours	No obs Effect Level	>100 mg/l
WHITE MINERAL OIL (PETROLEUM)	8042-47-5	Water flea	Estimated	21 days	No obs Effect Level	>100 mg/l
Castor oil	8001-79-4	Zebra Fish	Estimated	96 hours	Lethal Concentration 50%	>100 mg/l
1,2-BENZISOTHIAZOLIN-3-ONE	2634-33-5	Green algae	Experimental	72 hours	Effect Concentration 50%	0.11 mg/l
1,2-BENZISOTHIAZOLIN-3-ONE	2634-33-5	Pacific oyster	Experimental	48 hours	Effect Concentration 50%	0.062 mg/l
1,2-BENZISOTHIAZOLIN-3-ONE	2634-33-5	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	1.6 mg/l
1,2-BENZISOTHIAZOLIN-3-ONE	2634-33-5	Water flea	Experimental	48 hours	Effect Concentration 50%	2.9 mg/l

1,2-BENZISOTHIAZOLIN-3-ONE	2634-33-5	Green algae	Experimental	72 hours	No obs Effect Conc	0.0403 mg/l

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Aluminum Oxide (non-fibrous)	1344-28-1	Data not availbl-insufficient			N/A	
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	Estimated Biodegradation	28 days	Biological Oxygen Demand	74.7 % BOD/ThBOD	OECD 301F - Manometric Respiro
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	Estimated Biodegradation	28 days	Biological Oxygen Demand	69 % BOD/ThBOD	OECD 301F - Manometric Respiro
GLYCERIN	56-81-5	Experimental Biodegradation	14 days	Biological Oxygen Demand	63 % BOD/ThBOD	OECD 301C - MITI (I)
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	64742-94-5	Experimental Biodegradation	28 days	Biological Oxygen Demand	49.6 % BOD/ThBOD	OECD 301F - Manometric Respiro
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	Trade Secret	Experimental Biodegradation	28 days	Carbon dioxide evolution	61 % weight	Other methods
WHITE MINERAL OIL (PETROLEUM)	8042-47-5	Experimental Biodegradation	28 days	Carbon dioxide evolution	0 % weight	OECD 301B - Mod. Sturm or CO2
Castor oil	8001-79-4	Estimated Biodegradation	28 days	Biological Oxygen Demand	64 % weight	OECD 301D - Closed Bottle Test
1,2-BENZISOTHIAZOLIN-3-ONE	2634-33-5	Experimental Biodegradation	28 days	Biological Oxygen Demand	0 % BOD/ThBOD	OECD 301C - MITI (I)

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Aluminum Oxide (non-fibrous)	1344-28-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Naphtha (petroleum),	64742-82-1	Data not available or	N/A	N/A	N/A	N/A

hydrodesulfurized heavy		insufficient for classification				
HYDROTREATED LIGHT PETROLEUM DISTILLATES	64742-47-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
GLYCERIN	56-81-5	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	-1.76	Other methods
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	64742-94-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
POLYETHYLENE GLYCOL SORBITAN MONOOLEATE	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
WHITE MINERAL OIL (PETROLEUM)	8042-47-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Castor oil	8001-79-4	Estimated Bioconcentration		Bioaccumulation Factor	7.4	Est: Bioconcentration factor
1,2-BENZISOTHIAZOLIN-3-ONE	2634-33-5	Experimental BCF - Bluegill	56 days	Bioaccumulation Factor	6.62	

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:UN3082
Proper Shipping Name:ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Technical Name: None assigned.
Hazard Class/Division:9
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:UN3082
Proper Shipping Name:ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical Name: None assigned.
Hazard Class/Division:9
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. The components of this product are in compliance with the chemical notification requirements of TSCA. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC 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

3M Perfect-It III Fast Cut Plus Compound 50417