Safety Data Sheet

This Safety Data Sheet has been prepared in accordance with the Minister of Industry Decree No. 23/M-IND/PER/4/2013 and GHS Classification 4th Edition.

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SECTION 1: Identification

1.1. Product identifier
3M™ Finesse-It™ Polish - Final Finish, 28796, 82876, 82877, 82878, 84224, 88753

1.2. Recommended use and restrictions on use

Recommended use
Automotive, Glaze

1.3. Supplier's details
ADDRESS: PT. 3M Indonesia Jl. Diponegoro KM. 39 Tambun- Bekasi 17510 -Indonesia
Telephone: +6221-27794000
E Mail: IA-PRLGroup@mmm.com
Website: www.mmm.com

1.4. Emergency telephone number
(021)29974000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture
Skin Corrosion/Irritation: Category 2.
Specific Target Organ Toxicity (central nervous system): Category 3.

2.2. Label elements
Signal word
Warning

Symbols
Exclamation mark |

Pictograms

Hazard statements

H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.

Precautionary statements

Prevention:

P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P271	Use only outdoors or in a well-ventilated area.

Response:

P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical advice/attention.

Disposal:

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

2.3. Other hazards

None known

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt
Water	7732-18-5	15 - 40
Aluminum Oxide	1344-28-1	15 - 40
Glycerin	56-81-5	10 - 30
Hydrotreated Heavy Naphtha (Petroleum)	64742-48-9	7 - 13
Hydrotreated Light Petroleum Distillates	64742-47-8	5 - 10
White Mineral Oil (Petroleum)	8042-47-5	1 - 5
MORPHOLINE	110-91-8	< 0.6
Carbon Black	1333-86-4	< 0.1

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:

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

See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required
Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media
In case of fire: Use a carbon dioxide or dry chemical extinguisher to extinguish.

5.2. Special hazards arising from the substance or mixture
Closed containers exposed to heat from fire may build pressure and explode.

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. 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. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
For industrial or professional use only. Do not use in a confined area with minimal air exchange. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities
Store in a well-ventilated place. Keep container tightly closed. Keep from freezing. Store away from oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
MORPHOLINE	110-91-8	Amer Conf of	TWA:20 ppm	Skin Notation

		Gov. Indust. Hyg.		
MORPHOLINE	110-91-8	Indonesia OELs	TWA(8 hours):20 ppm	
Carbon Black	1333-86-4	Amer Conf of Gov. Indust. Hyg.	TWA(inhalable fraction):3 mg/m3	
Carbon Black	1333-86-4	Chemical Manufacturer Rec Guid	TWA:0.5 mg/m3	
Carbon Black	1333-86-4	Indonesia OELs	TWA(8 hours):3.5 mg/m3	
Aluminum Oxide	1344-28-1	Chemical Manufacturer Rec Guid	TWA:1 fiber/cc	
Aluminum Oxide	1344-28-1	Indonesia OELs	TWA(inhalable particulates)(8 hours):10 mg/m3	
Aluminum, inorganic compounds	1344-28-1	Indonesia OELs	TWA(8 hours):1 mg/m3	
Aluminum, insoluble compounds	1344-28-1	Amer Conf of Gov. Indust. Hyg.	TWA(respirable fraction):1 mg/m3	
Glycerin	56-81-5	Indonesia OELs	TWA(as mist)(8 hours):10 mg/m3	
Hydrotreated Light Petroleum Distillates	64742-47-8	Chemical Manufacturer Rec Guid	TWA:165 ppm	
Kerosine (petroleum)	64742-47-8	Amer Conf of Gov. Indust. Hyg.	TWA(as total hydrocarbon vapor, non-aerosol):200 mg/m3	Skin Notation
Hydrotreated Heavy Naphtha (Petroleum)	64742-48-9	Manufacturer determined	TWA:100 ppm	
MINERAL OILS, HIGHLY-REFINED OILS	8042-47-5	Amer Conf of Gov. Indust. Hyg.	TWA(inhalable fraction):5 mg/m3	
OIL MIST, MINERAL	8042-47-5	Indonesia OELs	TWA(as mist)(8 hours):5 mg/m3;STEL(as mist)(15 minutes):10 mg/m3	
White Mineral Oil (Petroleum)	8042-47-5	Chemical Manufacturer Rec Guid	TWA:5 mg/m3;STEL:10 mg/m3	

Amer Conf of Gov. Indust. Hyg. : American Conference of Governmental Industrial Hygienists
Chemical Manufacturer Rec Guid : Chemical Manufacturer's Recommended Guidelines
Indonesia OELs : Indonesia. Minister of Manpower and Transmigration Decree No. 13/MEN/X/2011 concerning Threshold Values, Chemical and Physical Factors in the Workplace.
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls
Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face

protection(s) are recommended:
As a good industrial hygiene practice:
Wear eye/face protection.

Safety Glasses with side shields
Indirect Vented Goggles

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

Respiratory protection

In case of inadequate ventilation wear 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
Appearance/Odor	Light Solvent Odor Gray Liquid
Odor threshold	*No Data Available*
pH	8.3 - 8.7
Melting point/Freezing point	*No Data Available*
Boiling point/Initial boiling point/Boiling range	Approximately 100 ºC
Flash Point	>=93.3 ºC [*Test Method:* Tagliabue Closed Cup]
Evaporation rate	>=1.0 [*Ref Std:* ETHER=1]
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	*Not Applicable*
Flammable Limits(UEL)	*Not Applicable*
Vapor Pressure	*No Data Available*
Vapor Density	1.00 [*Ref Std:* AIR=1]
Density	0.96 - 1 kg/l
Relative Density	0.96 - 1.0 [*Ref Std:* WATER=1]
Water solubility	Negligible
Solubility- non-water	*No Data Available*
Partition coefficient: n-octanol/ water	*No Data Available*
Autoignition temperature	*Not Applicable*
Decomposition temperature	*No Data Available*
Viscosity	13 - 18 Pa-s
Hazardous Air Pollutants	0.0016 % weight
Volatile Organic Compounds	20.3 % weight [*Test Method:* calculated SCAQMD rule 443.1] [*Details:* excluding exempt compounds]
Percent volatile	40.8 % weight
VOC Less H2O & Exempt Solvents	251 g/l [*Test Method:* calculated SCAQMD rule 443.1]

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
None known.

10.5. Incompatible materials
Strong oxidizing agents

10.6. Hazardous decomposition products

Substance	Condition
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified

SECTION 11: Toxicological information

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

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

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

May cause target organ effects after inhalation.

Skin Contact:
Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.

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

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

May cause target organ effects after ingestion.

Target Organ Effects:

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

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

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE > 5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
Aluminum Oxide			Data not available or insufficient for classification
Glycerin	Dermal	Rabbit	LD50 estimated to be > 5,000 mg/kg
Glycerin	Ingestion	Rat	LD50 > 5,000 mg/kg
Hydrotreated Heavy Naphtha (Petroleum)	Inhalation-Vapor		LC50 estimated to be 20 - 50 mg/l
Hydrotreated Heavy Naphtha (Petroleum)	Dermal	Rabbit	LD50 > 3,000 mg/kg
Hydrotreated Heavy Naphtha (Petroleum)	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 > 3.0 mg/l
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
MORPHOLINE	Dermal	Rabbit	LD50 310 mg/kg
MORPHOLINE	Inhalation-Vapor	Rat	LC50 estimated to be 10 - 20 mg/l
MORPHOLINE	Ingestion	Rat	LD50 1,050 mg/kg
Carbon Black	Dermal	Rabbit	LD50 > 3,000 mg/kg
Carbon Black	Ingestion	Rat	LD50 > 8,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Aluminum Oxide		Data not available or insufficient for classification
Glycerin	Rabbit	No significant irritation
Hydrotreated Heavy Naphtha (Petroleum)	Rabbit	Irritant
Hydrotreated Light Petroleum Distillates	Rabbit	Mild irritant
White Mineral Oil (Petroleum)	Rabbit	No significant irritation
MORPHOLINE	official classification	Corrosive
Carbon Black	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Aluminum Oxide		Data not available or insufficient for classification
Glycerin	Rabbit	No significant irritation
Hydrotreated Heavy Naphtha (Petroleum)	Rabbit	No significant irritation
Hydrotreated Light Petroleum Distillates	Rabbit	Mild irritant
White Mineral Oil (Petroleum)	Rabbit	Mild irritant
MORPHOLINE	Rabbit	Corrosive
Carbon Black	Rabbit	No significant irritation

Skin Sensitization

Name	Species	Value
Aluminum Oxide		Data not available or insufficient for classification
Glycerin	Guinea pig	Not sensitizing
Hydrotreated Heavy Naphtha (Petroleum)	Guinea	Not sensitizing

	pig	
Hydrotreated Light Petroleum Distillates	Guinea pig	Not sensitizing
White Mineral Oil (Petroleum)	Guinea pig	Not sensitizing
MORPHOLINE	Guinea pig	Not sensitizing
Carbon Black		Data not available or insufficient for classification

Respiratory Sensitization

Name	Species	Value
Aluminum Oxide		Data not available or insufficient for classification
Glycerin		Data not available or insufficient for classification
Hydrotreated Heavy Naphtha (Petroleum)		Data not available or insufficient for classification
Hydrotreated Light Petroleum Distillates		Data not available or insufficient for classification
White Mineral Oil (Petroleum)		Data not available or insufficient for classification
MORPHOLINE		Data not available or insufficient for classification
Carbon Black		Data not available or insufficient for classification

Germ Cell Mutagenicity

Name	Route	Value
Aluminum Oxide		Data not available or insufficient for classification
Glycerin		Data not available or insufficient for classification
Hydrotreated Heavy Naphtha (Petroleum)	In vivo	Not mutagenic
Hydrotreated Heavy Naphtha (Petroleum)	In Vitro	Some positive data exist, but the data are not sufficient for classification
Hydrotreated Light Petroleum Distillates	In Vitro	Not mutagenic
White Mineral Oil (Petroleum)	In Vitro	Not mutagenic
MORPHOLINE	In Vitro	Some positive data exist, but the data are not sufficient for classification
MORPHOLINE	In vivo	Some positive data exist, but the data are not sufficient for classification
Carbon Black	In Vitro	Not mutagenic
Carbon Black	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Aluminum Oxide			Data not available or insufficient for classification
Glycerin	Ingestion	Mouse	Some positive data exist, but the data are not sufficient for classification
Hydrotreated Heavy Naphtha (Petroleum)	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Hydrotreated Heavy Naphtha (Petroleum)	Inhalation	Human and animal	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
White Mineral Oil (Petroleum)	Dermal	Mouse	Not carcinogenic
White Mineral Oil (Petroleum)	Inhalation	Multiple animal species	Not carcinogenic
MORPHOLINE	Ingestion	Multiple animal species	Not carcinogenic
MORPHOLINE	Inhalation	Rat	Not carcinogenic
Carbon Black	Dermal	Mouse	Not carcinogenic
Carbon Black	Ingestion	Mouse	Not carcinogenic
Carbon Black	Inhalation	Rat	Carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration

Aluminum Oxide		Data not available or insufficient for classification			
Glycerin	Ingestion	Not toxic to female reproduction	Rat	NOAEL 2,000 mg/kg/day	2 generation
Glycerin	Ingestion	Not toxic to male reproduction	Rat	NOAEL 2,000 mg/kg/day	2 generation
Glycerin	Ingestion	Not toxic to development	Rat	NOAEL 2,000 mg/kg/day	2 generation
Hydrotreated Heavy Naphtha (Petroleum)	Inhalation	Not toxic to development	Rat	NOAEL 2.4 mg/l	during organogenesis
Hydrotreated Light Petroleum Distillates		Data not available or insufficient for classification			
White Mineral Oil (Petroleum)	Ingestion	Not toxic to female reproduction	Rat	NOAEL 4,350 mg/kg/day	13 weeks
White Mineral Oil (Petroleum)	Ingestion	Not toxic to male reproduction	Rat	NOAEL 4,350 mg/kg/day	13 weeks
White Mineral Oil (Petroleum)	Ingestion	Not toxic to development	Rat	NOAEL 4,350 mg/kg/day	during gestation
MORPHOLINE		Data not available or insufficient for classification			
Carbon Black		Data not available or insufficient for classification			

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Aluminum Oxide			Data not available or insufficient for classification			
Glycerin			Data not available or insufficient for classification			
Hydrotreated Heavy Naphtha (Petroleum)	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Hydrotreated Heavy Naphtha (Petroleum)	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Hydrotreated Heavy Naphtha (Petroleum)	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 6.5 mg/l	4 hours
Hydrotreated Light Petroleum Distillates	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
Hydrotreated Light Petroleum Distillates	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
White Mineral Oil (Petroleum)			Data not available or insufficient for classification			
MORPHOLINE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Aluminum Oxide			Data not available or insufficient for classification			
Glycerin	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 3.91 mg/l	14 days
Glycerin	Inhalation	heart | liver | kidney	All data are negative	Rat	NOAEL 3.91	14 days

		and/or bladder			mg/l	
Glycerin	Ingestion	endocrine system | hematopoietic system | liver | kidney and/or bladder	All data are negative	Rat	NOAEL 10,000 mg/kg/day	2 years
Hydrotreated Heavy Naphtha (Petroleum)	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 4.6 mg/l	6 months
Hydrotreated Heavy Naphtha (Petroleum)	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 1.9 mg/l	13 weeks
Hydrotreated Heavy Naphtha (Petroleum)	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 0.6 mg/l	90 days
Hydrotreated Heavy Naphtha (Petroleum)	Inhalation	bone, teeth, nails, and/or hair | blood | liver | muscles	All data are negative	Rat	NOAEL 5.6 mg/l	12 weeks
Hydrotreated Heavy Naphtha (Petroleum)	Inhalation	heart	All data are negative	Multiple animal species	NOAEL 1.3 mg/l	90 days
Hydrotreated Light Petroleum Distillates			Data not available or insufficient for classification			
White Mineral Oil (Petroleum)	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,381 mg/kg/day	90 days
White Mineral Oil (Petroleum)	Ingestion	liver | immune system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,336 mg/kg/day	90 days
MORPHOLINE	Dermal	liver | kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Guinea pig	LOAEL 900 mg/kg/day	13 days
MORPHOLINE	Dermal	hematopoietic system	All data are negative	Guinea pig	NOAEL 900 mg/kg/day	13 days
MORPHOLINE	Inhalation	eyes	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
MORPHOLINE	Inhalation	respiratory system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 0.09 mg/l	13 weeks
MORPHOLINE	Inhalation	liver | kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 64 mg/l	5 days
MORPHOLINE	Inhalation	heart | endocrine system	All data are negative	Rat	NOAEL 0.9 mg/l	13 weeks
MORPHOLINE	Inhalation	nervous system	All data are negative	Rat	NOAEL 0.53 mg/l	104 weeks
MORPHOLINE	Ingestion	kidney and/or bladder	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 160 mg/kg/day	30 days
MORPHOLINE	Ingestion	liver | respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 160 mg/kg/day	30 days
MORPHOLINE	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 800 mg/kg/day	30 days
MORPHOLINE	Ingestion	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 323 mg/kg/day	4 weeks
Carbon Black	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure

Aspiration Hazard

Name	Value
Aluminum Oxide	Not an aspiration hazard
Glycerin	Not an aspiration hazard
Hydrotreated Heavy Naphtha (Petroleum)	Aspiration hazard
Hydrotreated Light Petroleum Distillates	Aspiration hazard

White Mineral Oil (Petroleum)	Aspiration hazard
MORPHOLINE	Not an aspiration hazard
Carbon Black	Not an 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:
Not acutely toxic to aquatic life by GHS criteria.

Chronic aquatic hazard:
Not chronically toxic to aquatic life by GHS criteria.

No product test data available

Material	Cas #	Organism	Type	Exposure	Test Endpoint	Test Result
Glycerin	56-81-5	Water flea	Experimental	24 hours	Effect Concentration 50%	>10,000 mg/l
Glycerin	56-81-5	Goldfish	Experimental	24 hours	Lethal Concentration 50%	>5,000 mg/l
MORPHOLINE	110-91-8	Water flea	Experimental	48 hours	Effect Concentration 50%	45 mg/l
MORPHOLINE	110-91-8	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	380 mg/l
MORPHOLINE	110-91-8	Green algae	Experimental	96 hours	Effect Concentration 50%	28 mg/l
White Mineral Oil (Petroleum)	8042-47-5	Bluegill	Experimental	96 hours	Lethal Level 50%	>100 mg/l
MORPHOLINE	110-91-8	Water flea	Experimental	21 days	No obs Effect Conc	5 mg/l
White Mineral Oil (Petroleum)	8042-47-5	Water flea	Experimental	21 days	No obs Effect Conc	>100 mg/l
Carbon Black	1333-86-4		Data not available or insufficient for classification			
Hydrotreated Light	64742-47-8		Data not available or			

Petroleum Distillates			insufficient for classification			
Hydrotreated Heavy Naphtha (Petroleum)	64742-48-9		Data not available or insufficient for classification			

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
MORPHOLINE	110-91-8	Modeled Photolysis		Photolytic half-life (in air)	2.8 hours (t 1/2)	Other methods
Hydrotreated Heavy Naphtha (Petroleum)	64742-48-9	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
Carbon Black	1333-86-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Water	7732-18-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
MORPHOLINE	110-91-8	Experimental Biodegradation	28 days	Dissolv. Organic Carbon Deplet	93 % weight	OECD 301E - Modified OECD Scre
Glycerin	56-81-5	Experimental Biodegradation	14 days	Biological Oxygen Demand	63 % weight	OECD 301C - MITI (I)
White Mineral Oil (Petroleum)	8042-47-5	Experimental Biodegradation	28 days	Carbon dioxide evolution	0 % weight	OECD 301B - Mod. Sturm or CO2

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Hydrotreated Heavy Naphtha (Petroleum)	64742-48-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Water	7732-18-5	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
Carbon Black	1333-86-4	Data not available or	N/A	N/A	N/A	N/A

		insufficient for classification				
White Mineral Oil (Petroleum)	8042-47-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
MORPHOLINE	110-91-8	Experimental BCF - Other	42 days	Bioaccumulation Factor	<2.8	OECD 305C-Bioaccum degree fish
Glycerin	56-81-5	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	-1.76	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
Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

SECTION 14: Transport Information

Local Regulations
Land Transport: In accordance with Director General of Land Transportation Decree No. SK.725/AJ.302/DRJD/2004 which refer to UN Standard.
Sea Transport: In accordance with Minister of Transportation Decree No. KM 2/2010 which refer to IMDG Code Standard.

International Regulations

UN No.: Not applicable
UN Proper Shipping Name: Not applicable
Transportation Class (IMO): Not applicable
Transportation Class (IATA): Not applicable
Packing Group: Not applicable
Marine Pollutant: Not applicable

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 China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of the Korean Toxic Chemical

Control Law. 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.

Local Inventory Status

Addendum I Government Regulation No. 74/2001:
List of Hazardous Substances Approved for Use :
Glycerin is listed as a Hazardous Substance Approved for Use.

Addendum II Government Regulation No. 74/2001:
Tab.1 List of Prohibited Substances for Use:
None of the substances are listed as a Prohibited Substance for Use.

Addendum II Government Regulation No. 74/2001:
Tab.2 List of Restricted Substances for Use:
None of the substances are listed as a Restricted Substance for Use.

Addendum I Ministry of Health Regulation No. 472/1996:
List and Classification of Hazardous Substances for Health:
None of the substances are listed and classified as a Hazardous Substance for Health.

Addendum I Act of Minister of Industry and Trade No. 254/MPP/KEP/2000
List of Hazardous Substances that are Regulated to Import Trade System:
None of the substances are listed and classified as a Hazardous Substance that is Regulated to Import Trade System.

SECTION 16: Other information

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3M Indonesia SDSs are available at www.mmm.com