

Safety Data Sheet

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Document Group:	19-8283-4	Version Number:	2.00
Issue Date:	08/11/2018	Supercedes Date:	16/04/2014

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) ENGINE & TIRE DRESSING PN 38124 38125 38126

1.2. Recommended use and restrictions on use

Recommended use

Automotive, Surface appearance restoration

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

Serious Eye Damage/Irritation: Category 2.

2.2. Label elements Signal word Warning

Symbols Exclamation mark |

Pictograms



Hazard Statements H319	Causes serious eye irritation.		
Precautionary statements			
General:			
P102	Keep out of reach of children.		
P101	If medical advice is needed, have product container or label at hand.		
Response:			
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes.	Remove contact	
	lenses, if present and easy to do. Continue rinsing.		
2.3 Other hazards			

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	60 - 100	
Poly(Dimethylsiloxane)	63148-62-9	10 - 30	
Glycerin	56-81-5	3 - 7	
Poly(oxy-1,2-ethanediyl), .alpha[3,5- dimethyl-1-(2- methylpropyl)hexyl]omegahydroxy-	60828-78-6	0 - 3	
Ethoxylated Tetramethyldecynediol	9014-85-1	<= 0.2	

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:

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. 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

Material will not burn. Use a fire fighting agent suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

<u>Substance</u> Formaldehyde Carbon monoxide Carbon dioxide

<u>Condition</u> During Combustion During Combustion During Combustion

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

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. 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 water. 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 eye contact. Keep out of reach of children. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

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
Glycerin	56-81-5	Malaysia OELs	TWA(as mist)(8 hours):10	
			mg/m3	

ACGIH : American Conference of Governmental Industrial Hygienists CMRG : Chemical Manufacturer's Recommended Guidelines Malaysia OELs : Malaysia. Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations TWA: Time-Weighted-Average STEL: Short Term Exposure Limit CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

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

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended: 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. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended: Polymer laminate

Respiratory protection

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

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

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance/Odor	White Emulsion,
Odor threshold	No Data Available
рН	8 - 8.5
Melting point/Freezing point	Not Applicable
Boiling point/Initial boiling point/Boiling range	100 °C
Flash Point	No flash point
Evaporation rate	Not Applicable
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	Not Applicable
Flammable Limits(UEL)	Not Applicable
Vapor Density	Not Applicable
Density	1 g/ml
Relative Density	1 [<i>Ref Std</i> :WATER=1]
Water solubility	Complete
Solubility- non-water	No Data Available

Partition coefficient: n-octanol/ water	No Data Available
Autoignition temperature	Not Applicable
Decomposition temperature	No Data Available
Viscosity	1 - 50 mPa-s
Molecular weight	No Data Available
Volatile Organic Compounds	<= 0.1 % [<i>Test Method</i> :calculated per CARB title 2]
Volatile Organic Compounds	1 g/l [Test Method:calculated SCAQMD rule 443.1]
Percent volatile	60 - 90 % weight
VOC Less H2O & Exempt Solvents	2 g/l [Test Method:calculated SCAQMD rule 443.1]

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 None known.

10.5. Incompatible materials None known.

10.6. Hazardous decomposition products <u>Substance</u>

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.

Skin Contact:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Eye Contact:

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion:

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

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

Route	Species	Value
Ingestion		No data available; calculated ATE >5,000 mg/kg
Dermal	Rabbit	LD50 > 19,400 mg/kg
Ingestion	Rat	LD50 > 17,000 mg/kg
Dermal	Rabbit	LD50 estimated to be $> 5,000 \text{ mg/kg}$
Ingestion	Rat	LD50 > 5,000 mg/kg
Dermal	Rabbit	LD50 8,874 mg/kg
Ingestion	Rat	LD50 3,300 mg/kg
Dermal	Rat	LD50 > 2,000 mg/kg
Ingestion	Rat	LD50 6,400 mg/kg
	Ingestion Dermal Ingestion Dermal Ingestion Dermal Ingestion Dermal Ingestion Dermal	Ingestion Dermal Rabbit Ingestion Rat Dermal Rabbit Ingestion Rat Dermal Rabbit Ingestion Rat Dermal Rabbit Ingestion Rat Dermal Rat Dermal Rat

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Poly(Dimethylsiloxane)	Rabbit	No significant irritation
Glycerin	Rabbit	No significant irritation
Poly(oxy-1,2-ethanediyl), .alpha[3,5-dimethyl-1-(2-	Rabbit	Irritant
methylpropyl)hexyl]omegahydroxy-		
Ethoxylated Tetramethyldecynediol	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Poly(Dimethylsiloxane)	Rabbit	No significant irritation
Glycerin	Rabbit	No significant irritation
Poly(oxy-1,2-ethanediyl), .alpha[3,5-dimethyl-1-(2-	Rabbit	Corrosive
methylpropyl)hexyl]omegahydroxy-		
Ethoxylated Tetramethyldecynediol	Rabbit	Corrosive

Skin Sensitization

Name	Species	Value
Glycerin	Guinea pig	Not classified
Ethoxylated Tetramethyldecynediol	Mouse	Not classified

Respiratory Sensitization

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

Germ Cell Mutagenicity

Name	Route	Value
Ethoxylated Tetramethyldecynediol	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
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
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
Ethoxylated Tetramethyldecynediol	Ingestion	Not classified for female reproduction	Rat	NOAEL 2,000 mg/kg/day	1 generation
Ethoxylated Tetramethyldecynediol	Ingestion	Not classified for male reproduction	Rat	NOAEL 2,000 mg/kg/day	1 generation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Poly(oxy-1,2- ethanediyl), .alpha[3,5- dimethyl-1-(2- methylpropyl)hexyl]omeg ahydroxy-	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Ethoxylated Tetramethyldecynediol	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
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
Poly(oxy-1,2- ethanediyl), .alpha[3,5- dimethyl-1-(2- methylpropyl)hexyl]ome gahydroxy-	Ingestion	liver kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg	89 days
Ethoxylated Tetramethyldecynediol	Ingestion	liver blood kidney and/or bladder	Not classified	Dog	NOAEL 600 mg/kg/day	91 days

Aspiration Hazard

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

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	Туре	Exposure	Test Endpoint	Test Result
Poly(Dimethyls iloxane)	63148-62-9		Data not available or insufficient for classification			
Glycerin	56-81-5	Water flea	Experimental	48 hours	Lethal Concentration 50%	1,955 mg/l
Glycerin	56-81-5	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	54,000 mg/l
Poly(oxy-1,2- ethanediyl), .al pha[3,5- dimethyl-1-(2- methylpropyl)h exyl]omega hydroxy-	60828-78-6		Data not available or insufficient for classification			
Ethoxylated Tetramethyldec ynediol	9014-85-1	Fathead Minnow	Estimated	96 hours	Lethal Concentration 50%	36 mg/l
Ethoxylated Tetramethyldec ynediol	9014-85-1	Water flea	Estimated	48 hours	Effect Concentration 50%	88 mg/l
Ethoxylated Tetramethyldec ynediol	9014-85-1	Diatom	Experimental	72 hours	Effect Concentration 50%	76 mg/l
Ethoxylated Tetramethyldec ynediol	9014-85-1	Copepods	Experimental	48 hours	Lethal Concentration 50%	166 mg/l
Ethoxylated Tetramethyldec ynediol	9014-85-1	Fish other	Experimental	96 hours	Lethal Concentration 50%	52 mg/l
Ethoxylated Tetramethyldec ynediol	9014-85-1	Green Algae	Estimated	72 hours	Effect Concentration 50%	82 mg/l

Ethoxylated	9014-85-1	Green Algae	Estimated	72 hours	Effect	15 mg/l
Tetramethyldec					Concentration	
ynediol					10%	

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Poly(Dimethyls iloxane)	63148-62-9	Data not availbl- insufficient			N/A	
Glycerin	56-81-5	Experimental Biodegradation	14 days	Biological Oxygen Demand	63 % BOD/ThBOD	OECD 301C - MITI (I)
Poly(oxy-1,2- ethanediyl), .al pha[3,5- dimethyl-1-(2- methylpropyl)h exyl]omega hydroxy-	60828-78-6	Experimental Biodegradation	28 days	Biological Oxygen Demand	20 % weight	OECD 301D - Closed Bottle Test
Ethoxylated Tetramethyldec ynediol	9014-85-1	Experimental Biodegradation	28 days	Biological Oxygen Demand	0-31 % BOD/ThBOD	OECD 301D - Closed Bottle Test

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Poly(Dimethyls iloxane)	63148-62-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Glycerin	56-81-5	Experimental Bioconcentrati on		Log of Octanol/H2O part. coeff	-1.76	Other methods
Poly(oxy-1,2- ethanediyl), .al pha[3,5- dimethyl-1-(2- methylpropyl)h exyl]omega hydroxy-	60828-78-6	Estimated Bioconcentrati on		Log of Octanol/H2O part. coeff	3.82	Est: Octanol-water part. coeff
Ethoxylated Tetramethyldec ynediol	9014-85-1	Estimated BCF-Carp	28 days	Bioaccumulatio n Factor	<24	Other methods

12.4. Mobility in soil

Please contact manufacturer for more details

12.5 Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Disposal methods

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

SECTION 14: Transport Information

Not hazardous for transportation.

Marine Transport (IMDG)

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

Air Transport (IATA)

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

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

SECTION 15: Regulatory information

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

Global inventory status

Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information.

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