



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™ Body Schutz™, PN 08864

Product Identification Numbers

60-4550-4729-4 MS-9000-0983-0 MT-9001-6846-9

1.2. Recommended use and restrictions on use

Recommended use

Automotive, Rubberized Protective Coating

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 2.

Serious Eye Damage/Irritation: Category 2.

Skin Corrosion/Irritation: Category 2.

Chronic Aquatic Toxicity: Category 2.

2.2. Label elements

Signal word

Danger

Symbols

Flame | Exclamation mark | Environment |

Pictograms



Hazard Statements

H225	Highly flammable liquid and vapor.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

General:

P102	Keep out of reach of children.
P101	If medical advice is needed, have product container or label at hand.

Prevention:

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

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.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P370 + P378G	In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Storage:

P405	Store locked up.
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Disposal:

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

May cause drowsiness or dizziness.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	64742-49-0	40 - 70
CALCIUM ZINC RESINATE	68334-35-0	7 - 13
OXIDIZED PETROLEUM ASPHALT	64742-93-4	7 - 13
RUBBER, RECLAIMED	139497-04-4	3 - 7
CELLULOSE	9004-34-6	1 - 5
ETHYL ALCOHOL	64-17-5	1 - 5
SYNTHETIC RUBBER	Trade Secret	1 - 5

METHYLCYCLOHEXANE	108-87-2	< 3
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Trade Secret	< 0.5
2,2,4-Trimethylpentane	540-84-1	< 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:

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 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.

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. An appropriate aqueous film forming foam (AFFF) is recommended. 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

Do not use in a confined area with minimal air exchange. Keep out of reach of children. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. 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 release to the environment. 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 heat. 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
METHYLCYCLOHEXANE	108-87-2	ACGIH	TWA:400 ppm	
METHYLCYCLOHEXANE	108-87-2	Malaysia OELs	TWA(8 hours):1610 mg/m ³ (400 ppm)	
Octane	540-84-1	ACGIH	TWA:300 ppm	
Octane, all isomers	540-84-1	ACGIH	TWA:300 ppm	
Octane, all isomers	540-84-1	Malaysia OELs	TWA(8 hours):1400 mg/m ³ (300 ppm)	
ETHYL ALCOHOL	64-17-5	ACGIH	STEL:1000 ppm	A3: Confirmed animal carcin.
ETHYL ALCOHOL	64-17-5	Malaysia OELs	TWA(8 hours):1880 mg/m ³ (1000 ppm)	
CELLULOSE	9004-34-6	ACGIH	TWA:10 mg/m ³	
CELLULOSE	9004-34-6	Malaysia OELs	TWA(8 hours):10 mg/m ³	
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Trade Secret	ACGIH	TWA(inhalable fraction):5 mg/m ³ ;Limit value not established:	A4: Not class. as human carcin, A2: Suspected human carcin., Cntrl all exposr-low as possib
Solvent-Refined Heavy Paraffinic	Trade	Malaysia OELs	TWA(as mist)(8 hours):5	

Petroleum Distillates	Secret		mg/m3	
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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:

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

Nitrile Rubber

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	Black, strong solvent odor
Odor threshold	<i>No Data Available</i>
pH	<i>Not Applicable</i>
Melting point/Freezing point	<i>No Data Available</i>
Boiling point/Initial boiling point/Boiling range	60 °C [<i>Details:CONDITIONS:</i> (petroleum distillate)]
Flash Point	-9.4 °C [<i>Test Method:</i> Closed Cup]
Evaporation rate	2.5 [<i>Ref Std:</i> ETHER=1]
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	1 % volume
Flammable Limits(UEL)	7 % volume
Vapor Pressure	15,998.6 Pa [<i>Details:CONDITIONS:</i> @ 68F]
Vapor Density	3 [<i>Ref Std:</i> AIR=1]

Density	0.791 g/ml
Relative Density	0.791 [Ref Std: WATER=1]
Water solubility	Slight (less than 10%)
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	2,700 - 2,900 mPa-s
Volatile Organic Compounds	536 g/l [Test Method:calculated SCAQMD rule 443.1]
Volatile Organic Compounds	67.8 % weight [Test Method:calculated per CARB title 2]
Percent volatile	67.9 % weight
VOC Less H2O & Exempt Solvents	537 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

Heat

Sparks and/or flames

10.5. Incompatible materials

Strong oxidizing agents

Strong acids

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified
Toxic Vapor, Gas, Particulate	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 additional health effects (see below).

Skin Contact:

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

Eye Contact:

Moderate 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.

Additional Information:

This product contains ethanol. Alcoholic beverages and ethanol in alcoholic beverages have been classified by the International Agency for Research on Cancer as carcinogenic to humans. There are also data associating human consumption of alcoholic beverages with developmental toxicity and liver toxicity. Exposure to ethanol during the foreseeable use of this product is not expected to cause cancer, developmental toxicity, or liver toxicity.

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	Inhalation-Vapor(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Dermal	Rabbit	LD50 > 3,160 mg/kg
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Inhalation-Vapor (4 hours)	Rat	LC50 > 14.7 mg/l
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Ingestion	Rat	LD50 > 5,000 mg/kg
OXIDIZED PETROLEUM ASPHALT	Dermal	Rabbit	LD50 > 2,000 mg/kg
OXIDIZED PETROLEUM ASPHALT	Ingestion	Rat	LD50 > 5,000 mg/kg
CELLULOSE	Dermal	Rabbit	LD50 > 2,000 mg/kg
CELLULOSE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.8 mg/l
CELLULOSE	Ingestion	Rat	LD50 > 5,000 mg/kg
METHYLCYCLOHEXANE	Inhalation-Vapor (4 hours)	Mouse	LC50 26 mg/l
METHYLCYCLOHEXANE	Dermal	Rabbit	LD50 > 86,700 mg/kg
METHYLCYCLOHEXANE	Ingestion	Rat	LD50 > 3,200 mg/kg
SYNTHETIC RUBBER	Dermal		LD50 estimated to be > 5,000 mg/kg
SYNTHETIC RUBBER	Ingestion		LD50 estimated to be > 5,000 mg/kg
ETHYL ALCOHOL	Dermal	Rabbit	LD50 > 15,800 mg/kg
ETHYL ALCOHOL	Inhalation-Vapor (4	Rat	LC50 124.7 mg/l

3M™ Body Schutz™, PN 08864

	hours)		
ETHYL ALCOHOL	Ingestion	Rat	LD50 17,800 mg/kg
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Dermal	Rabbit	LD50 > 2,000 mg/kg
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Ingestion	Rat	LD50 > 5,000
2,2,4-Trimethylpentane	Dermal	Rabbit	LD50 > 2,000 mg/kg
2,2,4-Trimethylpentane	Inhalation-Vapor (4 hours)	Rat	LC50 > 33.5 mg/l
2,2,4-Trimethylpentane	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Rabbit	Irritant
OXIDIZED PETROLEUM ASPHALT	Human	Minimal irritation
CELLULOSE	Not available	No significant irritation
METHYLCYCLOHEXANE	Rabbit	Minimal irritation
SYNTHETIC RUBBER	Rabbit	No significant irritation
ETHYL ALCOHOL	Rabbit	No significant irritation
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Rabbit	Minimal irritation
2,2,4-Trimethylpentane	Human and animal	Minimal irritation

Serious Eye Damage/Irritation

Name	Species	Value
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Rabbit	Mild irritant
OXIDIZED PETROLEUM ASPHALT	Human	Mild irritant
CELLULOSE	Not available	No significant irritation
METHYLCYCLOHEXANE	Rabbit	Mild irritant
SYNTHETIC RUBBER	Professional judgement	No significant irritation
ETHYL ALCOHOL	Rabbit	Severe irritant
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Rabbit	Mild irritant
2,2,4-Trimethylpentane	Rabbit	Mild irritant

Skin Sensitization

Name	Species	Value
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Guinea pig	Not classified
ETHYL ALCOHOL	Human	Not classified
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Guinea pig	Not classified
2,2,4-Trimethylpentane	Human	Not classified

Photosensitization

Name	Species	Value
OXIDIZED PETROLEUM ASPHALT	Human	Not 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
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HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	In Vitro	Not mutagenic
OXIDIZED PETROLEUM ASPHALT	In vivo	Not mutagenic
OXIDIZED PETROLEUM ASPHALT	In Vitro	Some positive data exist, but the data are not sufficient for classification
ETHYL ALCOHOL	In Vitro	Some positive data exist, but the data are not sufficient for classification
ETHYL ALCOHOL	In vivo	Some positive data exist, but the data are not sufficient for classification
Solvent-Refined Heavy Paraffinic Petroleum Distillates	In Vitro	Some positive data exist, but the data are not sufficient for classification
2,2,4-Trimethylpentane	In vivo	Not mutagenic
2,2,4-Trimethylpentane	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
OXIDIZED PETROLEUM ASPHALT	Not Specified	Human and animal	Some positive data exist, but the data are not sufficient for classification
METHYLCYCLOHEXANE	Inhalation	Multiple animal species	Not carcinogenic
ETHYL ALCOHOL	Ingestion	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
ETHYL ALCOHOL	Inhalation	Not classified for development	Rat	NOAEL 38 mg/l	during gestation
ETHYL ALCOHOL	Ingestion	Not classified for development	Rat	NOAEL 5,200 mg/kg/day	prematuring & during gestation
2,2,4-Trimethylpentane	Inhalation	Not classified for development	Rat	NOAEL 5.6 mg/l	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
METHYLCYCLOHEXANE	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	
METHYLCYCLOHEXANE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure

METHYLCYCLOHEXANE	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
ETHYL ALCOHOL	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	LOAEL 2.6 mg/l	30 minutes
ETHYL ALCOHOL	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	LOAEL 9.4 mg/l	not available
ETHYL ALCOHOL	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL not available	
ETHYL ALCOHOL	Ingestion	kidney and/or bladder	Not classified	Dog	NOAEL 3,000 mg/kg	
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
2,2,4-Trimethylpentane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not available
2,2,4-Trimethylpentane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
2,2,4-Trimethylpentane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not applicable

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
OXIDIZED PETROLEUM ASPHALT	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
METHYLCYCLOHEXANE	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 1.6 mg/l	12 months
METHYLCYCLOHEXANE	Inhalation	liver	Not classified	Rabbit	NOAEL 12 mg/l	10 weeks
ETHYL ALCOHOL	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rabbit	LOAEL 124 mg/l	365 days
ETHYL ALCOHOL	Inhalation	hematopoietic system immune system	Not classified	Rat	NOAEL 25 mg/l	14 days
ETHYL ALCOHOL	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 8,000 mg/kg/day	4 months
ETHYL ALCOHOL	Ingestion	kidney and/or bladder	Not classified	Dog	NOAEL 3,000 mg/kg/day	7 days
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.21 mg/l	28 days
2,2,4-Trimethylpentane	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 5.6 mg/l	12 weeks
2,2,4-Trimethylpentane	Inhalation	kidney and/or bladder	Not classified	Rat	LOAEL 0.2 mg/l	1 years
2,2,4-Trimethylpentane	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL Not available	4 weeks
2,2,4-Trimethylpentane	Ingestion	liver	Not classified	Rat	NOAEL 500 mg/kg/day	21 days

Aspiration Hazard

Name	Value
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	Aspiration hazard

METHYLCYCLOHEXANE	Aspiration hazard
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Aspiration hazard
2,2,4-Trimethylpentane	Aspiration hazard

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labeling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

Acute aquatic hazard:

GHS Acute 2: Toxic to aquatic life.

Chronic aquatic hazard:

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

No product test data available

Material	Cas #	Organism	Type	Exposure	Test Endpoint	Test Result
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	64742-49-0	Fathead Minnow	Estimated	96 hours	Lethal Level 50%	8.2 mg/l
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	64742-49-0	Green Algae	Estimated	72 hours	Effect Level 50%	3.1 mg/l
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	64742-49-0	Water flea	Estimated	48 hours	Effect Level 50%	4.5 mg/l
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	64742-49-0	Green Algae	Estimated	72 hours	No obs Effect Level	0.5 mg/l
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	64742-49-0	Water flea	Estimated	21 days	No obs Effect Level	2.6 mg/l
CALCIUM ZINC RESINATE	68334-35-0	Fathead Minnow	Estimated	96 hours	Lethal Concentration 50%	1.7 mg/l
CALCIUM	68334-35-0	Green Algae	Estimated	72 hours	Effect	39.6 mg/l

ZINC RESINATE					Concentration 50%	
CALCIUM ZINC RESINATE	68334-35-0	Water flea	Estimated	48 hours	Effect Concentration 50%	1.6 mg/l
CALCIUM ZINC RESINATE	68334-35-0	Green Algae	Estimated	72 hours	No obs Effect Conc	6.25 mg/l
OXIDIZED PETROLEUM ASPHALT	64742-93-4		Data not available or insufficient for classification			
RUBBER, RECLAIMED	139497-04-4		Data not available or insufficient for classification			
CELLULOSE	9004-34-6		Data not available or insufficient for classification			
ETHYL ALCOHOL	64-17-5	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	42 mg/l
ETHYL ALCOHOL	64-17-5	Water flea	Experimental	48 hours	Lethal Concentration 50%	5,012 mg/l
ETHYL ALCOHOL	64-17-5	Algae other	Experimental	96 hours	No obs Effect Conc	1,580 mg/l
ETHYL ALCOHOL	64-17-5	Water flea	Experimental	10 days	No obs Effect Conc	9.6 mg/l
SYNTHETIC RUBBER	Trade Secret		Data not available or insufficient for classification			
METHYLCYCLOHEXANE	108-87-2	Green Algae	Experimental	72 hours	Effect Concentration 50%	0.134 mg/l
METHYLCYCLOHEXANE	108-87-2	Ricefish	Experimental	96 hours	Lethal Concentration 50%	2.07 mg/l
METHYLCYCLOHEXANE	108-87-2	Water flea	Experimental	48 hours	Effect Concentration 50%	0.326 mg/l
METHYLCYCLOHEXANE	108-87-2	Green Algae	Experimental	72 hours	No obs Effect Conc	0.022 mg/l
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Trade Secret	Fathead Minnow	Estimated	96 hours	Lethal Level 50%	>100 mg/l
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Trade Secret	Water flea	Estimated	48 hours	Effect Concentration 50%	>100 mg/l

Solvent-Refined Heavy Paraffinic Petroleum Distillates	Trade Secret	Green algae	Experimental	96 hours	Effect Level 50%	>100 mg/l
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Trade Secret	Green algae	Experimental	96 hours	No obs Effect Level	100 mg/l
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Trade Secret	Water flea	Experimental	21 days	No obs Effect Level	100 mg/l
2,2,4-Trimethylpentane	540-84-1	Water flea	Estimated	48 hours	Effect Concentration 50%	0.4 mg/l
2,2,4-Trimethylpentane	540-84-1	Ricefish	Experimental	96 hours	Lethal Concentration 50%	0.561 mg/l

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	64742-49-0	Estimated Biodegradation	28 days	Biological Oxygen Demand	77 % BOD/ThBOD	OECD 301F - Manometric Respiro
CALCIUM ZINC RESINATE	68334-35-0	Experimental Biodegradation	28 days	Carbon dioxide evolution	80 % weight	OECD 301B - Mod. Sturm or CO2
OXIDIZED PETROLEUM ASPHALT	64742-93-4	Data not availbl-insufficient			N/A	
RUBBER, RECLAIMED	139497-04-4	Data not availbl-insufficient			N/A	
CELLULOSE	9004-34-6	Data not availbl-insufficient			N/A	
ETHYL ALCOHOL	64-17-5	Experimental Biodegradation	14 days	Biological Oxygen Demand	89 % BOD/ThBOD	OECD 301C - MITI (I)
SYNTHETIC RUBBER	Trade Secret	Data not availbl-insufficient			N/A	
METHYLCYCLOHEXANE	108-87-2	Estimated Photolysis		Photolytic half-life (in air)	3.1 days (t 1/2)	Other methods
METHYLCYCLOHEXANE	108-87-2	Experimental Biodegradation	28 days	Biological Oxygen Demand	0 % weight	OECD 301D - Closed Bottle Test
Solvent-Refined Heavy	Trade Secret	Experimental Biodegradation	28 days	Carbon dioxide evolution	22 % weight	OECD 301B - Mod. Sturm or CO2

Paraffinic Petroleum Distillates						
2,2,4-Trimethylpentane	540-84-1	Experimental Photolysis		Photolytic half-life (in air)	8.36 days (t _{1/2})	Other methods
2,2,4-Trimethylpentane	540-84-1	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
HYDROTREATED LIGHT NAPHTHA (PETROLEUM)	64742-49-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
CALCIUM ZINC RESINATE	68334-35-0	Experimental Bioconcentration		Log of Octanol/H ₂ O part. coeff	1.84	Other methods
OXIDIZED PETROLEUM ASPHALT	64742-93-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
RUBBER, RECLAIMED	139497-04-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
CELLULOSE	9004-34-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
ETHYL ALCOHOL	64-17-5	Experimental Bioconcentration		Log of Octanol/H ₂ O part. coeff	-0.35	Other methods
SYNTHETIC RUBBER	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
METHYLCYCLOHEXANE	108-87-2	Experimental BCF-Carp	56 days	Bioaccumulation Factor	≤321	OECD 305E-Bioaccum FI-thru fis
Solvent-Refined Heavy Paraffinic Petroleum Distillates	Trade Secret	Estimated Bioconcentration		Bioaccumulation Factor	7.5	Est: Bioconcentration factor
2,2,4-Trimethylpentane	540-84-1	Experimental BCF-Carp	28 days	Bioaccumulation Factor	540	OECD 305E-Bioaccum FI-thru fis

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:UN1139

Proper Shipping Name:COATING SOLUTION

Technical Name:None assigned.

Hazard Class/Division:3

Subsidiary Risk:None assigned.

Packing Group:II

Limited Quantity:Yes

Marine Pollutant: Yes

Marine Pollutant Technical Name: None assigned.

Other Dangerous Goods Descriptions:

None assigned.

Air Transport (IATA)

UN Number:UN1139

Proper Shipping Name:COATING SOLUTION

Technical Name:None assigned.

Hazard Class/Division:3

Subsidiary Risk:None assigned.

Packing Group:II

Limited Quantity:None assigned.

Marine Pollutant: Yes

Marine Pollutant Technical Name: None assigned.

Other Dangerous Goods Descriptions:

None assigned.

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

SECTION 15: Regulatory information

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

Global inventory status

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances

(EINECS), or are exempt polymers whose monomers are listed on EINECS. Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of 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 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.

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