



Safety Data Sheet

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Document Group:	10-3197-0	Version Number:	4.00
Issue Date:	06/10/2021	Supersedes Date:	11/05/2021

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™ Scotch-Seal™ Tamper Proof Sealant White

Product Identification Numbers

62-1926-2604-2 62-1926-2605-9

1.2. Recommended use and restrictions on use

Recommended use

Sealant, Industrial use

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 Sensitizer: Category 1.
Carcinogenicity: Category 2.
Reproductive Toxicity: Category 1B.
Specific Target Organ Toxicity (repeated exposure): Category 2.
Chronic Aquatic Toxicity: Category 2.

2.2. Label elements

Signal word

Danger

Symbols

Flame | Exclamation mark | Health Hazard | Environment |

Pictograms



Hazard Statements:

- H225 Highly flammable liquid and vapor.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H351 Suspected of causing cancer.
- H360 May damage fertility or the unborn child.
- H373 May cause damage to organs through prolonged or repeated exposure: nervous system | sensory organs | skin.
- H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention:

- P201 Obtain special instructions before use.
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P273 Avoid release to the environment.
- P280E Wear protective gloves.
- P281 Use personal protective equipment as required.

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.
- P308 + P313 IF exposed or concerned: Get medical advice/attention.
- P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
- P370 + P378 In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Disposal:

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

2.3. Other hazards

Although titanium dioxide is classified as a carcinogen, exposures associated with this health effect are not expected during normal, intended use of this product., May cause drowsiness or dizziness.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt
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Methyl Ethyl Ketone	78-93-3	15 - 40
Limestone	1317-65-3	10 - 30
Mica-group Minerals	12001-26-2	10 - 30
Titanium Dioxide	13463-67-7	7 - 13
Acrylonitrile-Butadiene Polymer	9003-18-3	3 - 7
Alkanes, C20-28, chloro	2097144-43-7	1 - 5
Ammonia, o-Cresol, Formaldehyde, Phenol Polymer	55185-45-0	1 - 5
Antimony Trioxide	1309-64-4	1 - 5
Feldspars	68476-25-5	< 5
Kaolin	1332-58-7	< 5
p-tert-Butylphenol-Formaldehyde Resin	25085-50-1	1 - 5
Quartz Silica	14808-60-7	< 5
Isopropyl Alcohol	67-63-0	< 2
Toluene	108-88-3	< 2
Cyclohexane	110-82-7	< 1
Heptane	142-82-5	< 1
Salicylic Acid	69-72-7	< 0.6
Zinc Oxide	1314-13-2	< 0.4
Octhilinone	26530-20-1	< 0.06

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:

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

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

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide
Carbon dioxide
Hydrogen Chloride
Oxides of Antimony

Condition

During Combustion
During Combustion
During Combustion
During Combustion

5.3. Special protective actions for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Contain spill. Cover spill area with a fire-extinguishing foam. 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

For industrial/occupational use only. Not for consumer sale or use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (gloves, respirators, etc.) as required. 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
Toluene	108-88-3	ACGIH	TWA:20 ppm	A4: Not class. as human carcin, Ototoxicant
Toluene	108-88-3	Malaysia OELs	TWA(8 hours):188 mg/m ³ (50 ppm)	SKIN
Cyclohexane	110-82-7	ACGIH	TWA:100 ppm	
Cyclohexane	110-82-7	Malaysia OELs	TWA(8 hours):1030 mg/m ³ (300 ppm)	
Mica-group Minerals	12001-26-2	ACGIH	TWA(respirable fraction):0.1 mg/m ³	
Mica-group Minerals	12001-26-2	Malaysia OELs	TWA (proposed)(respirable fraction)(8 hours):3 mg/m ³	
ANTIMONY COMPOUNDS	1309-64-4	Malaysia OELs	TWA(as Sb)(8 hours):0.5 mg/m ³	
Antimony Trioxide	1309-64-4	ACGIH	TWA(inhalable fraction):0.02 mg/m ³	A2: Suspected human carcin.
ANTIMONY TRIOXIDE PRODUCTION	1309-64-4	Malaysia OELs	Limit value not established:	
DUST, INERT OR NUISANCE	1314-13-2	Malaysia OELs	TWA (proposed)(respirable particles)(8 hours):3 mg/m ³ ;TWA (proposed)(Inhalable particulate)(8 hours):10 mg/m ³	
Zinc Oxide	1314-13-2	ACGIH	TWA(respirable fraction):2 mg/m ³ ;STEL(respirable fraction):10 mg/m ³	
Zinc Oxide	1314-13-2	Malaysia OELs	TWA(as fume)(8 hours):5 mg/m ³ ;TWA(as dust)(8 hours):10 mg/m ³	
Limestone	1317-65-3	Malaysia OELs	TWA (proposed)(8 hours):10 mg/m ³	
Kaolin	1332-58-7	ACGIH	TWA(respirable fraction):2 mg/m ³	A4: Not class. as human carcin
Kaolin	1332-58-7	Malaysia OELs	TWA (proposed)(respirable fraction)(8 hours):2 mg/m ³	
DUST, INERT OR NUISANCE	13463-67-7	Malaysia OELs	TWA (proposed)(respirable particles)(8 hours):3 mg/m ³ ;TWA (proposed)(Inhalable particulate)(8 hours):10 mg/m ³	
Titanium Dioxide	13463-67-7	ACGIH	TWA:10 mg/m ³	A4: Not class. as human carcin
Titanium Dioxide	13463-67-7	Malaysia OELs	TWA(8 hours):10 mg/m ³	
Heptane	142-82-5	ACGIH	TWA:400 ppm;STEL:500 ppm	
Heptane	142-82-5	Malaysia OELs	TWA(8 hours):1640 mg/m ³ (400 ppm)	
Quartz Silica	14808-60-7	ACGIH	TWA(respirable fraction):0.025 mg/m ³	A2: Suspected human carcin.

Quartz Silica	14808-60-7	Malaysia OELs	TWA(respirable fraction)(8 hours):0.1 mg/m3	
Isopropyl Alcohol	67-63-0	ACGIH	TWA:200 ppm;STEL:400 ppm	A4: Not class. as human carcin
Isopropyl Alcohol	67-63-0	Malaysia OELs	TWA(8 hours):983 mg/m3(400 ppm)	
Methyl Ethyl Ketone	78-93-3	ACGIH	TWA:200 ppm;STEL:300 ppm	
Methyl Ethyl Ketone	78-93-3	Malaysia OELs	TWA(8 hours):590 mg/m3(200 ppm)	

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. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended: Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

Respiratory protection

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

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

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
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Specific Physical Form:	Paste
Color	White
Odor	Solvent
Odor threshold	<i>No Data Available</i>
pH	<i>Not Applicable</i>
Melting point/Freezing point	<i>Not Applicable</i>
Boiling point/Initial boiling point/Boiling range	>=80 °C [<i>Details:MEK</i>]
Flash Point	-8.9 °C [<i>Test Method:Closed Cup</i>]
Evaporation rate	2.7 [<i>Ref.Std:ETHER=1</i>]
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	1.8 % volume
Flammable Limits(UEL)	10 % volume
Vapor Pressure	<=12,132.3 Pa [<i>@ 25 °C</i>]
Vapor Density and/or Relative Vapor Density	2.41 [<i>Ref Std: AIR=1</i>]
Density	1.5 g/ml
Relative Density	1.5 [<i>Ref Std: WATER=1</i>]
Water solubility	Nil
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	404 °C
Decomposition temperature	<i>No Data Available</i>
Viscosity/Kinematic Viscosity	250,000 mPa-s [<i>@ 23 °C</i>]
Volatile Organic Compounds	479 g/l [<i>Details:EU VOC content</i>]
Percent volatile	25 - 35 % weight
VOC Less H2O & Exempt Solvents	479 g/l [<i>Test Method:calculated SCAQMD rule 443.1</i>]
Molecular weight	<i>No Data Available</i>

Nanoparticles

This material does not contain nanoparticles.

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

10.6. Hazardous decomposition products**Substance**

None known.

Condition

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation:

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

May cause additional health effects (see below).

Skin Contact:

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

May cause additional health effects (see below).

Eye Contact:

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

Ingestion:

May be harmful if swallowed.

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

May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

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

Prolonged or repeated exposure may cause target organ effects:

Ocular Effects: Signs/symptoms may include blurred or significantly impaired vision.

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Olfactory Effects: Signs/symptoms may include decreased ability to detect odors and/or complete loss of smell.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

Dermal Effects: Signs/symptoms may include redness, itching, acne, or bumps on the skin.

Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

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 ATE2,000 - 5,000 mg/kg
Methyl Ethyl Ketone	Dermal	Rabbit	LD50 > 8,050 mg/kg
Methyl Ethyl Ketone	Inhalation-Vapor (4 hours)	Rat	LC50 34.5 mg/l
Methyl Ethyl Ketone	Ingestion	Rat	LD50 2,737 mg/kg
Mica-group Minerals	Dermal		LD50 estimated to be > 5,000 mg/kg
Mica-group Minerals	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Limestone	Dermal	Rat	LD50 > 2,000 mg/kg
Limestone	Inhalation-Dust/Mist (4 hours)	Rat	LC50 3 mg/l
Limestone	Ingestion	Rat	LD50 6,450 mg/kg
Titanium Dioxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium Dioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 6.82 mg/l
Titanium Dioxide	Ingestion	Rat	LD50 > 10,000 mg/kg
Acrylonitrile-Butadiene Polymer	Dermal	Rabbit	LD50 > 15,000 mg/kg
Acrylonitrile-Butadiene Polymer	Ingestion	Rat	LD50 > 30,000 mg/kg
Antimony Trioxide	Dermal	Rabbit	LD50 > 6,685 mg/kg
Antimony Trioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.76 mg/l
Antimony Trioxide	Ingestion	Rat	LD50 > 34,600 mg/kg
Quartz Silica	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz Silica	Ingestion		LD50 estimated to be > 5,000 mg/kg
Feldspars	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg
Feldspars	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Kaolin	Dermal		LD50 estimated to be > 5,000 mg/kg
Kaolin	Ingestion	Human	LD50 > 15,000 mg/kg
Toluene	Dermal	Rat	LD50 12,000 mg/kg
Toluene	Inhalation-Vapor (4 hours)	Rat	LC50 30 mg/l
Toluene	Ingestion	Rat	LD50 5,550 mg/kg
p-tert-Butylphenol-Formaldehyde Resin	Dermal		LD50 estimated to be > 5,000 mg/kg
p-tert-Butylphenol-Formaldehyde Resin	Ingestion	Rat	LD50 5,660 mg/kg
Ammonia, o-Cresol, Formaldehyde, Phenol Polymer	Dermal		LD50 estimated to be > 5,000 mg/kg
Ammonia, o-Cresol, Formaldehyde, Phenol Polymer	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Isopropyl Alcohol	Dermal	Rabbit	LD50 12,870 mg/kg
Isopropyl Alcohol	Inhalation-Vapor (4 hours)	Rat	LC50 72.6 mg/l
Isopropyl Alcohol	Ingestion	Rat	LD50 4,710 mg/kg
Heptane	Dermal	Rabbit	LD50 3,000 mg/kg

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Heptane	Inhalation-Vapor (4 hours)	Rat	LC50 103 mg/l
Heptane	Ingestion	Rat	LD50 > 15,000 mg/kg
Cyclohexane	Dermal	Rat	LD50 > 2,000 mg/kg
Cyclohexane	Inhalation-Vapor (4 hours)	Rat	LC50 > 32.9 mg/l
Cyclohexane	Ingestion	Rat	LD50 6,200 mg/kg
Salicylic Acid	Dermal	Rat	LD50 > 2,000 mg/kg
Salicylic Acid	Ingestion	Rat	LD50 891 mg/kg
Zinc Oxide	Dermal		LD50 estimated to be > 5,000 mg/kg
Zinc Oxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.7 mg/l
Zinc Oxide	Ingestion	Rat	LD50 > 5,000 mg/kg
Octhilinone	Dermal	Rabbit	LD50 311 mg/kg
Octhilinone	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.27 mg/l
Octhilinone	Ingestion	Rat	LD50 125 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Methyl Ethyl Ketone	Rabbit	Minimal irritation
Limestone	Rabbit	No significant irritation
Titanium Dioxide	Rabbit	No significant irritation
Acrylonitrile-Butadiene Polymer	Professional judgement	No significant irritation
Antimony Trioxide	Human and animal	Minimal irritation
Quartz Silica	Professional judgement	No significant irritation
Feldspars	Professional judgement	No significant irritation
Kaolin	Professional judgement	No significant irritation
Toluene	Rabbit	Irritant
Isopropyl Alcohol	Multiple animal species	No significant irritation
Heptane	Human	Mild irritant
Cyclohexane	Rabbit	Mild irritant
Salicylic Acid	Rabbit	No significant irritation
Zinc Oxide	Human and animal	No significant irritation
Octhilinone	Rabbit	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
Methyl Ethyl Ketone	Rabbit	Severe irritant
Limestone	Rabbit	No significant irritation

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Titanium Dioxide	Rabbit	No significant irritation
Acrylonitrile-Butadiene Polymer	Professional judgement	No significant irritation
Antimony Trioxide	Rabbit	Mild irritant
Kaolin	Professional judgement	No significant irritation
Toluene	Rabbit	Moderate irritant
Isopropyl Alcohol	Rabbit	Severe irritant
Heptane	Professional judgement	Moderate irritant
Cyclohexane	Rabbit	Mild irritant
Salicylic Acid	Rabbit	Corrosive
Zinc Oxide	Rabbit	Mild irritant
Oethylinone	similar health hazards	Corrosive

Sensitization:

Skin Sensitization

Name	Species	Value
Titanium Dioxide	Human and animal	Not classified
Antimony Trioxide	Human	Not classified
Toluene	Guinea pig	Not classified
p-tert-Butylphenol-Formaldehyde Resin	Human	Some positive data exist, but the data are not sufficient for classification
Isopropyl Alcohol	Guinea pig	Not classified
Salicylic Acid	Mouse	Not classified
Zinc Oxide	Guinea pig	Not classified
Oethylinone	Human and animal	Sensitizing

Photosensitization

Name	Species	Value
Salicylic Acid	Mouse	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
Methyl Ethyl Ketone	In Vitro	Not mutagenic
Titanium Dioxide	In Vitro	Not mutagenic
Titanium Dioxide	In vivo	Not mutagenic
Antimony Trioxide	In Vitro	Some positive data exist, but the data are not sufficient for classification
Antimony Trioxide	In vivo	Some positive data exist, but the data are not sufficient for classification
Quartz Silica	In Vitro	Some positive data exist, but the data are not

		sufficient for classification
Quartz Silica	In vivo	Some positive data exist, but the data are not sufficient for classification
Toluene	In Vitro	Not mutagenic
Toluene	In vivo	Not mutagenic
Isopropyl Alcohol	In Vitro	Not mutagenic
Isopropyl Alcohol	In vivo	Not mutagenic
Heptane	In Vitro	Not mutagenic
Cyclohexane	In Vitro	Not mutagenic
Cyclohexane	In vivo	Some positive data exist, but the data are not sufficient for classification
Salicylic Acid	In Vitro	Not mutagenic
Salicylic Acid	In vivo	Not mutagenic
Zinc Oxide	In Vitro	Some positive data exist, but the data are not sufficient for classification
Zinc Oxide	In vivo	Some positive data exist, but the data are not sufficient for classification
Octhilinone	In Vitro	Not mutagenic
Octhilinone	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Methyl Ethyl Ketone	Inhalation	Human	Not carcinogenic
Titanium Dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium Dioxide	Inhalation	Rat	Carcinogenic
Antimony Trioxide	Inhalation	Multiple animal species	Carcinogenic
Quartz Silica	Inhalation	Human and animal	Carcinogenic
Kaolin	Inhalation	Multiple animal species	Not carcinogenic
Toluene	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Toluene	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
Toluene	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
Isopropyl Alcohol	Inhalation	Rat	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
Methyl Ethyl Ketone	Inhalation	Not classified for development	Rat	LOAEL 8.8 mg/l	during gestation
Limestone	Ingestion	Not classified for development	Rat	NOAEL 625 mg/kg/day	prematuring & during gestation
Antimony Trioxide	Inhalation	Not classified for female reproduction	Rat	LOAEL 0.25 mg/l	prematuring & during gestation
Toluene	Inhalation	Not classified for female reproduction	Human	NOAEL Not available	occupational exposure
Toluene	Inhalation	Not classified for male reproduction	Rat	NOAEL 2.3 mg/l	1 generation
Toluene	Ingestion	Toxic to development	Rat	LOAEL 520 mg/kg/day	during gestation
Toluene	Inhalation	Toxic to development	Human	NOAEL Not	poisoning

				available	and/or abuse
Isopropyl Alcohol	Ingestion	Not classified for development	Rat	NOAEL 400 mg/kg/day	during organogenesis
Isopropyl Alcohol	Inhalation	Not classified for development	Rat	LOAEL 9 mg/l	during gestation
Cyclohexane	Inhalation	Not classified for female reproduction	Rat	NOAEL 24 mg/l	2 generation
Cyclohexane	Inhalation	Not classified for male reproduction	Rat	NOAEL 24 mg/l	2 generation
Cyclohexane	Inhalation	Not classified for development	Rat	NOAEL 6.9 mg/l	2 generation
Salicylic Acid	Ingestion	Toxic to development	Rat	NOAEL 75 mg/kg/day	during organogenesis
Zinc Oxide	Ingestion	Not classified for reproduction and/or development	Multiple animal species	NOAEL 125 mg/kg/day	premating & during gestation
Oethylinone	Ingestion	Not classified for development	Rabbit	NOEL 20 mg/kg/day	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Methyl Ethyl Ketone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	official classification	NOAEL Not available	
Methyl Ethyl Ketone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Methyl Ethyl Ketone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
Methyl Ethyl Ketone	Ingestion	liver	Not classified	Rat	NOAEL Not available	not applicable
Methyl Ethyl Ketone	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 1,080 mg/kg	not applicable
Limestone	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.812 mg/l	90 minutes
Antimony Trioxide	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Toluene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Toluene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Toluene	Inhalation	immune system	Not classified	Mouse	NOAEL 0.004 mg/l	3 hours
Toluene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
Isopropyl Alcohol	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Isopropyl Alcohol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Isopropyl Alcohol	Inhalation	auditory system	Not classified	Guinea pig	NOAEL 13.4 mg/l	24 hours
Isopropyl Alcohol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
Heptane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Heptane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	

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Heptane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Cyclohexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Cyclohexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	
Cyclohexane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
Octhilinone	Inhalation	respiratory irritation	May cause respiratory irritation	Rat	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Methyl Ethyl Ketone	Dermal	nervous system	Not classified	Guinea pig	NOAEL Not available	31 weeks
Methyl Ethyl Ketone	Inhalation	liver kidney and/or bladder heart endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system immune system muscles	Not classified	Rat	NOAEL 14.7 mg/l	90 days
Methyl Ethyl Ketone	Ingestion	liver	Not classified	Rat	NOAEL Not available	7 days
Methyl Ethyl Ketone	Ingestion	nervous system	Not classified	Rat	NOAEL 173 mg/kg/day	90 days
Mica-group Minerals	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Limestone	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
Titanium Dioxide	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.01 mg/l	2 years
Titanium Dioxide	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
Antimony Trioxide	Dermal	skin	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Antimony Trioxide	Inhalation	pulmonary fibrosis	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 0.002 mg/l	1 years
Antimony Trioxide	Inhalation	liver	Not classified	Rat	NOAEL 0.043 mg/l	1 years
Antimony Trioxide	Inhalation	blood	Not classified	Rat	NOAEL 0.004 mg/l	not available
Antimony Trioxide	Inhalation	pneumoconiosis	Not classified	Human	LOAEL 0.01 mg/l	occupational exposure
Antimony Trioxide	Inhalation	heart	Not classified	Rat	NOAEL 0.02 mg/l	1 years
Antimony Trioxide	Ingestion	blood liver	Not classified	Rat	NOAEL 418 mg/kg/day	not available
Antimony Trioxide	Ingestion	heart	Not classified	Rat	NOAEL Not available	not available
Quartz Silica	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Kaolin	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL NA	occupational exposure
Kaolin	Inhalation	pulmonary fibrosis	Not classified	Rat	NOAEL Not available	
Toluene	Inhalation	auditory system eyes olfactory	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse

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		system				
Toluene	Inhalation	nervous system	May cause damage to organs though prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Toluene	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 2.3 mg/l	15 months
Toluene	Inhalation	heart liver kidney and/or bladder	Not classified	Rat	NOAEL 11.3 mg/l	15 weeks
Toluene	Inhalation	endocrine system	Not classified	Rat	NOAEL 1.1 mg/l	4 weeks
Toluene	Inhalation	immune system	Not classified	Mouse	NOAEL Not available	20 days
Toluene	Inhalation	bone, teeth, nails, and/or hair	Not classified	Mouse	NOAEL 1.1 mg/l	8 weeks
Toluene	Inhalation	hematopoietic system vascular system	Not classified	Human	NOAEL Not available	occupational exposure
Toluene	Inhalation	gastrointestinal tract	Not classified	Multiple animal species	NOAEL 11.3 mg/l	15 weeks
Toluene	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 625 mg/kg/day	13 weeks
Toluene	Ingestion	heart	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	liver kidney and/or bladder	Not classified	Multiple animal species	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	hematopoietic system	Not classified	Mouse	NOAEL 600 mg/kg/day	14 days
Toluene	Ingestion	endocrine system	Not classified	Mouse	NOAEL 105 mg/kg/day	28 days
Toluene	Ingestion	immune system	Not classified	Mouse	NOAEL 105 mg/kg/day	4 weeks
Isopropyl Alcohol	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 12.3 mg/l	24 months
Isopropyl Alcohol	Inhalation	nervous system	Not classified	Rat	NOAEL 12 mg/l	13 weeks
Isopropyl Alcohol	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 400 mg/kg/day	12 weeks
Heptane	Inhalation	liver nervous system kidney and/or bladder	Not classified	Rat	NOAEL 12 mg/l	26 weeks
Cyclohexane	Inhalation	liver	Not classified	Rat	NOAEL 24 mg/l	90 days
Cyclohexane	Inhalation	auditory system	Not classified	Rat	NOAEL 1.7 mg/l	90 days
Cyclohexane	Inhalation	kidney and/or bladder	Not classified	Rabbit	NOAEL 2.7 mg/l	10 weeks
Cyclohexane	Inhalation	hematopoietic system	Not classified	Mouse	NOAEL 24 mg/l	14 weeks
Cyclohexane	Inhalation	peripheral nervous system	Not classified	Rat	NOAEL 8.6 mg/l	30 weeks
Salicylic Acid	Ingestion	liver	Not classified	Rat	NOAEL 500 mg/kg/day	3 days
Zinc Oxide	Ingestion	nervous system	Not classified	Rat	NOAEL 600 mg/kg/day	10 days
Zinc Oxide	Ingestion	endocrine system hematopoietic system kidney and/or bladder	Not classified	Other	NOAEL 500 mg/kg/day	6 months

Aspiration Hazard

Name	Value
Toluene	Aspiration hazard

Heptane	Aspiration hazard
Cyclohexane	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
Methyl Ethyl Ketone	78-93-3	Activated sludge	Experimental	12 hours	IC50	1,873 mg/l
Methyl Ethyl Ketone	78-93-3	Bacteria	Experimental	16 hours	NOEC	1,150 mg/l
Methyl Ethyl Ketone	78-93-3	Fathead Minnow	Experimental	96 hours	LC50	2,993 mg/l
Methyl Ethyl Ketone	78-93-3	Green algae	Experimental	96 hours	EC50	2,029 mg/l
Methyl Ethyl Ketone	78-93-3	Water flea	Experimental	48 hours	EC50	308 mg/l
Methyl Ethyl Ketone	78-93-3	Green Algae	Experimental	96 hours	EC10	1,289 mg/l
Methyl Ethyl Ketone	78-93-3	Water flea	Experimental	21 days	NOEC	100 mg/l
Limestone	1317-65-3	Green algae	Estimated	72 hours	EC50	>100 mg/l
Limestone	1317-65-3	Rainbow Trout	Estimated	96 hours	LC50	>100 mg/l
Limestone	1317-65-3	Water flea	Estimated	48 hours	EC50	>100 mg/l
Limestone	1317-65-3	Green algae	Estimated	72 hours	EC10	>100 mg/l
Mica-group Minerals	12001-26-2		Data not available or insufficient for classification			N/A
Titanium Dioxide	13463-67-7	Activated sludge	Experimental	3 hours	NOEC	>=1,000 mg/l
Titanium Dioxide	13463-67-7	Diatom	Experimental	72 hours	EC50	>10,000 mg/l
Titanium Dioxide	13463-67-7	Fathead Minnow	Experimental	96 hours	LC50	>100 mg/l
Titanium Dioxide	13463-67-7	Water flea	Experimental	48 hours	EC50	>100 mg/l

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Titanium Dioxide	13463-67-7	Diatom	Experimental	72 hours	NOEC	5,600 mg/l
Acrylonitrile-Butadiene Polymer	9003-18-3		Data not available or insufficient for classification			N/A
Alkanes, C20-28, chloro	2097144-43-7	Rainbow Trout	Estimated	96 hours	No tox obs at lmt of water sol	>100 mg/l
Alkanes, C20-28, chloro	2097144-43-7	Water flea	Estimated	24 hours	No tox obs at lmt of water sol	>100 mg/l
Alkanes, C20-28, chloro	2097144-43-7	Rainbow Trout	Estimated	60 days	No tox obs at lmt of water sol	>100 mg/l
Alkanes, C20-28, chloro	2097144-43-7	Water flea	Estimated	21 days	No tox obs at lmt of water sol	>100 mg/l
Ammonia, o-Cresol, Formaldehyde, Phenol Polymer	55185-45-0		Data not available or insufficient for classification			N/A
Antimony Trioxide	1309-64-4	Green Algae	Endpoint not reached	72 hours	EC50	>100 mg/l
Antimony Trioxide	1309-64-4		Estimated	96 hours	EC50	2.12 mg/l
Antimony Trioxide	1309-64-4	Fathead Minnow	Estimated	96 hours	LC50	17.2 mg/l
Antimony Trioxide	1309-64-4	Fish other	Estimated	96 hours	LC50	8.3 mg/l
Antimony Trioxide	1309-64-4	Activated sludge	Experimental	4 hours	NOEC	6.1 mg/l
Antimony Trioxide	1309-64-4	Rainbow Trout	Estimated	28 days	LC10	0.188 mg/l
Antimony Trioxide	1309-64-4	Water flea	Estimated	21 days	NOEC	2.08 mg/l
Antimony Trioxide	1309-64-4	Green Algae	Experimental	72	NOEC	2.53 mg/l
Feldspars	68476-25-5		Data not available or insufficient for classification			N/A
Kaolin	1332-58-7	Water flea	Experimental	48 hours	LC50	>1,100 mg/l
p-tert-Butylphenol-Formaldehyde Resin	25085-50-1		Data not available or insufficient for classification			N/A
Quartz Silica	14808-60-7	Green Algae	Estimated	72 hours	EC50	440 mg/l
Quartz Silica	14808-60-7	Water flea	Estimated	48 hours	EC50	7,600 mg/l
Quartz Silica	14808-60-7	Zebra Fish	Estimated	96 hours	LC50	5,000 mg/l
Quartz Silica	14808-60-7	Green Algae	Estimated	72 hours	NOEC	60 mg/l
Isopropyl Alcohol	67-63-0	Bacteria	Experimental	16 hours	LOEC	1,050 mg/l
Isopropyl Alcohol	67-63-0	Crustacea	Experimental	24 hours	LC50	>10,000 mg/l
Isopropyl Alcohol	67-63-0	Green Algae	Experimental	72 hours	EC50	>1,000 mg/l

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Isopropyl Alcohol	67-63-0	Medaka	Experimental	96 hours	LC50	>100 mg/l
Isopropyl Alcohol	67-63-0	Water flea	Experimental	48 hours	EC50	>1,000 mg/l
Isopropyl Alcohol	67-63-0	Green algae	Experimental	72 hours	NOEC	1,000 mg/l
Isopropyl Alcohol	67-63-0	Water flea	Experimental	21 days	NOEC	100 mg/l
Toluene	108-88-3	Coho Salmon	Experimental	96 hours	LC50	5.5 mg/l
Toluene	108-88-3	Grass Shrimp	Experimental	96 hours	LC50	9.5 mg/l
Toluene	108-88-3	Green Algae	Experimental	72 hours	EC50	12.5 mg/l
Toluene	108-88-3	Leopard frog	Experimental	9 days	LC50	0.39 mg/l
Toluene	108-88-3	Pink Salmon	Experimental	96 hours	LC50	6.41 mg/l
Toluene	108-88-3	Water flea	Experimental	48 hours	EC50	3.78 mg/l
Toluene	108-88-3	Coho Salmon	Experimental	40 days	NOEC	1.39 mg/l
Toluene	108-88-3	Diatom	Experimental	72 hours	NOEC	10 mg/l
Toluene	108-88-3	Water flea	Experimental	7 days	NOEC	0.74 mg/l
Toluene	108-88-3	Activated sludge	Experimental	12 hours	IC50	292 mg/l
Toluene	108-88-3	Bacteria	Experimental	16 hours	NOEC	29 mg/l
Toluene	108-88-3	Bacteria	Experimental	24 hours	EC50	84 mg/l
Toluene	108-88-3	Redworm	Experimental	28 days	LC50	>150 mg per kg of bodyweight
Toluene	108-88-3	Soil microbes	Experimental	28 days	NOEC	<26 mg/kg (Dry Weight)
Cyclohexane	110-82-7	Bacteria	Experimental	24 hours	IC50	97 mg/l
Cyclohexane	110-82-7	Fathead Minnow	Experimental	96 hours	LC50	4.53 mg/l
Cyclohexane	110-82-7	Water flea	Experimental	48 hours	EC50	0.9 mg/l
Heptane	142-82-5	Water flea	Experimental	48 hours	EC50	1.5 mg/l
Heptane	142-82-5	Water flea	Estimated	21 days	NOEC	0.17 mg/l
Salicylic Acid	69-72-7	Green algae	Experimental	72 hours	EC50	>100 mg/l
Salicylic Acid	69-72-7	Medaka	Experimental	96 hours	LC50	>100 mg/l
Salicylic Acid	69-72-7	Water flea	Experimental	48 hours	EC50	870 mg/l
Salicylic Acid	69-72-7	Water flea	Experimental	21 days	NOEC	10 mg/l
Salicylic Acid	69-72-7	Activated sludge	Experimental	3 hours	EC50	>3,200
Salicylic Acid	69-72-7	Bacteria	Experimental	18 hours	EC10	465
Zinc Oxide	1314-13-2	Activated sludge	Estimated	3 hours	EC50	6.5 mg/l
Zinc Oxide	1314-13-2	Green Algae	Estimated	72 hours	EC50	0.052 mg/l
Zinc Oxide	1314-13-2	Rainbow Trout	Estimated	96 hours	LC50	0.21 mg/l
Zinc Oxide	1314-13-2	Water flea	Estimated	48 hours	EC50	0.07 mg/l
Zinc Oxide	1314-13-2	Green Algae	Estimated	72 hours	NOEC	0.006 mg/l
Zinc Oxide	1314-13-2	Water flea	Estimated	7 days	NOEC	0.02 mg/l
Octhilinone	26530-20-1	Diatom	Experimental	72 hours	EC50	0.0015 mg/l
Octhilinone	26530-20-1	Green algae	Experimental	72 hours	EC50	0.084 mg/l
Octhilinone	26530-20-1	Mysid Shrimp	Experimental	96 hours	LC50	0.071 mg/l
Octhilinone	26530-20-1	Rainbow Trout	Experimental	96 hours	LC50	0.036 mg/l
Octhilinone	26530-20-1	Sheepshead Minnow	Experimental	96 hours	LC50	0.18 mg/l
Octhilinone	26530-20-1	Water flea	Experimental	48 hours	EC50	0.42 mg/l
Octhilinone	26530-20-1	Diatom	Experimental	72 hours	NOEC	0.00068 mg/l

Octhilinone	26530-20-1	Green algae	Experimental	72 hours	NOEC	0.0156 mg/l
Octhilinone	26530-20-1	Water flea	Experimental	21 days	NOEC	0.0016 mg/l
Octhilinone	26530-20-1	Activated sludge	Experimental	3 hours	EC50	30.4 mg/l
Octhilinone	26530-20-1	Bobwhite quail	Experimental	14 days	LD50	384 ppm diet
Octhilinone	26530-20-1	Lettuce	Experimental	17 days	EC50	45 mg/kg (Dry Weight)
Octhilinone	26530-20-1	Redworm	Experimental	14 days	LC50	866 mg/kg (Dry Weight)
Octhilinone	26530-20-1	Soil microbes	Experimental	28 days	EC50	84.1 mg/kg (Dry Weight)

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Methyl Ethyl Ketone	78-93-3	Experimental Biodegradation	28 days	Biological Oxygen Demand	98 % BOD/ThBOD	OECD 301D - Closed Bottle Test
Limestone	1317-65-3	Data not availbl-insufficient			N/A	
Mica-group Minerals	12001-26-2	Data not availbl-insufficient			N/A	
Titanium Dioxide	13463-67-7	Data not availbl-insufficient			N/A	
Acrylonitrile-Butadiene Polymer	9003-18-3	Data not availbl-insufficient			N/A	
Alkanes, C20-28, chloro	2097144-43-7	Estimated Biodegradation	25 days	Biological Oxygen Demand	7.5 % BOD/ThBOD	
Ammonia, o-Cresol, Formaldehyde, Phenol Polymer	55185-45-0	Data not availbl-insufficient			N/A	
Antimony Trioxide	1309-64-4	Data not availbl-insufficient			N/A	
Feldspars	68476-25-5	Data not availbl-insufficient			N/A	
Kaolin	1332-58-7	Data not availbl-insufficient			N/A	
p-tert-Butylphenol-Formaldehyde Resin	25085-50-1	Experimental Biodegradation	28 days	Carbon dioxide evolution	0 %CO2 evolution/THC O2 evolution	
Quartz Silica	14808-60-7	Data not availbl-insufficient			N/A	
Isopropyl	67-63-0	Experimental	14 days	Biological	86 %	OECD 301C - MITI (I)

Alcohol		Biodegradation		Oxygen Demand	BOD/ThBOD	
Toluene	108-88-3	Experimental Photolysis		Photolytic half-life (in air)	5.2 days (t 1/2)	
Toluene	108-88-3	Experimental Biodegradation	20 days	Biological Oxygen Demand	80 % BOD/ThBOD	APHA Std Meth Water/Wastewater
Cyclohexane	110-82-7	Experimental Photolysis		Photolytic half-life (in air)	4.14 days (t 1/2)	Non-standard method
Cyclohexane	110-82-7	Experimental Biodegradation	28 days	Biological Oxygen Demand	77 % BOD/ThBOD	OECD 301F - Manometric Respiro
Heptane	142-82-5	Experimental Photolysis		Photolytic half-life (in air)	4.24 days (t 1/2)	Non-standard method
Heptane	142-82-5	Experimental Biodegradation	28 days	Biological Oxygen Demand	101 % BOD/ThBOD	OECD 301C - MITI (I)
Salicylic Acid	69-72-7	Experimental Biodegradation	14 days	Biological Oxygen Demand	88.1 % BOD/ThBOD	OECD 301C - MITI (I)
Zinc Oxide	1314-13-2	Data not available - insufficient			N/A	
Octhilinone	26530-20-1	Experimental Biodegradation	28 days	Biological Oxygen Demand	< 10 % BOD/ThBOD	OECD 301D - Closed Bottle Test
Octhilinone	26530-20-1	Experimental Aquatic Inherent Biodegrad.	59 days	Dissolv. Organic Carbon Deplet	88 % removal of DOC	OECD 303A - Simulated Aerobic

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Methyl Ethyl Ketone	78-93-3	Experimental Bioconcentration		Log of Octanol/H ₂ O part. coeff	0.29	Non-standard method
Limestone	1317-65-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Mica-group Minerals	12001-26-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Titanium Dioxide	13463-67-7	Experimental BCF-Carp	42 days	Bioaccumulation Factor	9.6	Non-standard method
Acrylonitrile-Butadiene Polymer	9003-18-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Alkanes, C ₂₀₋₂₈ , chloro	2097144-43-7	Estimated BCF - Rainbow Trout	60 days	Bioaccumulation Factor	37.6	

Alkanes, C20-28, chloro	2097144-43-7	Estimated Bioconcentration		Log of Octanol/H2O part. coeff	≥7.63	
Ammonia, o-Cresol, Formaldehyde, Phenol Polymer	55185-45-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Antimony Trioxide	1309-64-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Feldspars	68476-25-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Kaolin	1332-58-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
p-tert-Butylphenol-Formaldehyde Resin	25085-50-1	Estimated Bioconcentration		Bioaccumulation Factor	7.4	Non-standard method
Quartz Silica	14808-60-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Isopropyl Alcohol	67-63-0	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	0.05	Non-standard method
Toluene	108-88-3	Experimental BCF - Other	72 hours	Bioaccumulation Factor	90	
Toluene	108-88-3	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	2.73	
Cyclohexane	110-82-7	Experimental BCF-Carp	56 days	Bioaccumulation Factor	129	OECD 305E-Bioaccum FI-thru fis
Heptane	142-82-5	Estimated Bioconcentration		Bioaccumulation Factor	105	Est: Bioconcentration factor
Salicylic Acid	69-72-7	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	2.26	
Zinc Oxide	1314-13-2	Experimental BCF-Carp	56 days	Bioaccumulation Factor	≤217	OECD 305E-Bioaccum FI-thru fis
Oethylinone	26530-20-1	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	2.92	OECD 117 log Kow HPLC method

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:UN1866

Proper Shipping Name:RESIN SOLUTION

Technical Name:None assigned.

Hazard Class/Division:3

Subsidiary Risk:None assigned.

Packing Group:II

Limited Quantity:Yes

Marine Pollutant: None assigned.

Marine Pollutant Technical Name: None assigned.

Other Dangerous Goods Descriptions:

None assigned.

Air Transport (IATA)

UN Number:UN1866

Proper Shipping Name:RESIN SOLUTION

Technical Name:None assigned.

Hazard Class/Division:3

Subsidiary Risk:None assigned.

Packing Group:II

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 Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). 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. All required components of this product are listed on the active portion of the TSCA 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