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™ Paint Buster Hand Cleaner, PN 05604, 05975

Product Identification Numbers
60-4550-4948-0 60-4550-5501-6 XH-0038-1778-6 XH-0038-5388-0

1.2. Recommended use and restrictions on use

Recommended use
Hand Cleaner

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.
Carcinogenicity: Category 1A.
Specific Target Organ Toxicity (repeated exposure): Category 2.

2.2. Label elements
Signal word
Danger

Symbols
Exclamation mark | Health Hazard |

Pictograms

Hazard Statements

H319	Causes serious eye irritation.
H350	May cause cancer.
H373	May cause damage to organs through prolonged or repeated exposure: respiratory system |

Precautionary statements

General:

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

Prevention:

P201	Obtain special instructions before use.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P280B	Wear protective gloves and eye/face protection.
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.

Storage:

P405	Store locked up.

Disposal:

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

2.3. Other hazards

None known

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt
Dimethyl Adipate	627-93-0	40 - 70
Polyethylene Glycol	25322-68-3	7 - 13
Dimethyl Glutarate	1119-40-0	1 - 10
Bentonite	1302-78-9	< 7
Cellulose	9004-34-6	3 - 7
Stearic Acid	57-11-4	3 - 7
Talc	14807-96-6	3 - 7
Lanolin	8006-54-0	1 - 5
Petrolatum	8009-03-8	1 - 5
Synthetic Amorphous Silica, Fumed, Crystalline Free	112945-52-5	1 - 5

Triethanolamine	102-71-6	1 - 5
d-Limonene	5989-27-5	0.5 1.5
Sodium di(2-ethylhexyl) sulfosuccinate	577-11-7	0.5 - 1.5
Quartz Silica	14808-60-7	< 0.5
Cristobalite	14464-46-1	< 0.15

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
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 ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture
None inherent in this product.

Hazardous Decomposition or By-Products

Substance	Condition
Aldehydes	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Oxides of Nitrogen	During Combustion

5.3. Special protective actions for fire-fighters
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. 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
Keep out of reach of children. Do not handle until all safety precautions have been read and understood. 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.) Use personal protective equipment (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities
Keep from freezing. 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
Triethanolamine	102-71-6	ACGIH	TWA:5 mg/m3	
Triethanolamine	102-71-6	Malaysia OELs	TWA(8 hours):5 mg/m3	
CONTINUOUS FILAMENT GLASS FIBERS	14464-46-1	ACGIH	TWA(as fiber):1 fiber/cc	A4: Not class. as human carcin
CONTINUOUS FILAMENT GLASS FIBERS, INHALABLE FRACTION	14464-46-1	ACGIH	TWA(inhalable fraction):5 mg/m3	A4: Not class. as human carcin
Cristobalite	14464-46-1	ACGIH	TWA(respirable fraction):0.025 mg/m3	A2: Suspected human carcin.
Cristobalite	14464-46-1	Malaysia OELs	TWA(respirable fraction)(8 hours):0.05 mg/m3	
GLASS FILAMENTS	14464-46-1	Malaysia OELs	TWA(as fiber)(8 hours):1 fibers/ml;TWA(inhalable fraction)(8 hours):5 mg/m3	
DUST, INERT OR NUISANCE	14807-96-6	Malaysia OELs	TWA (proposed)(Inhalable particulate)(8 hours):10 mg/m3;TWA (proposed)(respirable particles)(8 hours):3 mg/m3	

Talc	14807-96-6	ACGIH	TWA(respirable fraction):2 mg/m3	A4: Not class. as human carcin
Talc	14807-96-6	Malaysia OELs	TWA(respirable fraction)(8 hours):2 mg/m3	
Quartz Silica	14808-60-7	ACGIH	TWA(respirable fraction):0.025 mg/m3	A2: Suspected human carcin.
Quartz Silica	14808-60-7	Malaysia OELs	TWA(respirable fraction)(8 hours):0.1 mg/m3	
STEARATES	57-11-4	ACGIH	TWA(inhalable fraction):10 mg/m3;TWA(respirable fraction):3 mg/m3	A4: Not class. as human carcin
STEARATES	57-11-4	Malaysia OELs	TWA(8 hours):10 mg/m3	
Mineral oils (untreated and mildly treated)	8009-03-8	ACGIH	Limit value not established:	A2: Suspected human carcin., Cntrl all exposr-low as possib
MINERAL OILS, HIGHLY-REFINED OILS	8009-03-8	ACGIH	TWA(inhalable fraction):5 mg/m3	A4: Not class. as human carcin
OIL MIST, MINERAL	8009-03-8	Malaysia OELs	TWA(as mist)(8 hours):5 mg/m3	
Cellulose	9004-34-6	ACGIH	TWA:10 mg/m3	
Cellulose	9004-34-6	Malaysia OELs	TWA(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
When used as intended as a hand cleaner, chemical protective gloves are not required.
For all other uses:

> 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: Fluoroelastomer
Nitrile Rubber
Polyvinyl Alcohol (PVA)

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 – Nitrile
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 Paste
Specific Physical Form:	Paste
Color	Light Tan
Odor	Sweet Odor
Odor threshold	*No Data Available*
pH	8.1 - 8.7
Melting point/Freezing point	*No Data Available*
Boiling point/Initial boiling point/Boiling range	>=101.7 ºC
Flash Point	93.9 ºC [*Test Method:*Closed Cup]
Evaporation rate	*No Data Available*
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	*No Data Available*
Flammable Limits(UEL)	*No Data Available*
Vapor Pressure	133.3 Pa [*Test Method:*Estimated] [*Details:*CONDITIONS: @ 20 C]
Vapor Density	*No Data Available*
Density	1.1 - 1.2 kg/l
Relative Density	1.10843 - 1.16834 [*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	>= 40,000 mPa-s
Volatile Organic Compounds	0.8 % weight [*Test Method:*calculated per CARB title 2]
Volatile Organic Compounds	678 g/l [*Test Method:*calculated SCAQMD rule 443.1]
Percent volatile	58.5 % weight [*Details:*(excluding exempt compounds)]
VOC Less H2O & Exempt Solvents	681 g/l [*Test Method:*calculated SCAQMD rule 443.1]

SECTION 10: Stability and reactivity

10.1. Reactivity
This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

10.2. Chemical stability
Stable.

10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4. Conditions to avoid
None known.

10.5. Incompatible materials
Strong oxidizing agents

10.6. Hazardous decomposition products

Substance	Condition
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

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

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.

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.

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:
Pneumoconiosis: Sign/symptoms may include persistent cough, breathlessness, chest pain, increased amounts of sputum, and changes in lung function tests.

Carcinogenicity:
Contains a chemical(s) which may cause cancer following prolonged, repeated inhalation of dust from dried or cured product.

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

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Polyethylene Glycol	Dermal	Rabbit	LD50 > 20,000 mg/kg
Polyethylene Glycol	Ingestion	Rat	LD50 32,770 mg/kg
Dimethyl Glutarate	Dermal	Rabbit	LD50 > 5,000 mg/kg
Dimethyl Glutarate	Ingestion	Rat	LD50 > 5,000 mg/kg
Stearic Acid	Dermal	Rabbit	LD50 > 2,000 mg/kg
Stearic Acid	Ingestion	Rat	LD50 > 5,000 mg/kg
Talc	Dermal		LD50 estimated to be > 5,000 mg/kg
Talc	Ingestion		LD50 estimated to be > 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
Triethanolamine	Dermal	Rabbit	LD50 > 2,000 mg/kg
Triethanolamine	Ingestion	Rat	LD50 9,000 mg/kg
Petrolatum	Dermal		LD50 estimated to be > 5,000 mg/kg
Petrolatum	Ingestion	Rat	LD50 > 5,000 mg/kg
Synthetic Amorphous Silica, Fumed, Crystalline Free	Dermal	Rabbit	LD50 > 5,000 mg/kg
Synthetic Amorphous Silica, Fumed, Crystalline Free	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Synthetic Amorphous Silica, Fumed, Crystalline Free	Ingestion	Rat	LD50 > 5,110 mg/kg
Sodium di(2-ethylhexyl) sulfosuccinate	Dermal	Rabbit	LD50 > 10,000 mg/kg
Sodium di(2-ethylhexyl) sulfosuccinate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 20 mg/l
Sodium di(2-ethylhexyl) sulfosuccinate	Ingestion	Rat	LD50 > 2,100 mg/kg
d-Limonene	Inhalation-Vapor (4 hours)	Mouse	LC50 > 3.14 mg/l
d-Limonene	Dermal	Rabbit	LD50 > 5,000 mg/kg
d-Limonene	Ingestion	Rat	LD50 4,400 mg/kg
Quartz Silica	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz Silica	Ingestion		LD50 estimated to be > 5,000 mg/kg
Cristobalite	Dermal		LD50 estimated to be > 5,000 mg/kg
Cristobalite	Ingestion		LD50 estimated to be > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Polyethylene Glycol	Rabbit	Minimal irritation
Stearic Acid	Rabbit	No significant irritation
Talc	Rabbit	No significant irritation
Cellulose	Not available	No significant irritation
Triethanolamine	Rabbit	Minimal irritation
Synthetic Amorphous Silica, Fumed, Crystalline Free	Rabbit	No significant irritation
Sodium di(2-ethylhexyl) sulfosuccinate	Rabbit	Irritant
d-Limonene	Rabbit	Mild irritant
Quartz Silica	Professional judgemen	No significant irritation

	t	
Cristobalite	Professional judgement	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Polyethylene Glycol	Rabbit	Mild irritant
Stearic Acid	Rabbit	No significant irritation
Talc	Rabbit	No significant irritation
Cellulose	Not available	No significant irritation
Triethanolamine	Rabbit	Mild irritant
Synthetic Amorphous Silica, Fumed, Crystalline Free	Rabbit	No significant irritation
Sodium di(2-ethylhexyl) sulfosuccinate	Rabbit	Corrosive
d-Limonene	Rabbit	Mild irritant

Skin Sensitization

Name	Species	Value
Polyethylene Glycol	Guinea pig	Not classified
Triethanolamine	Human	Not classified
Synthetic Amorphous Silica, Fumed, Crystalline Free	Human and animal	Not classified
d-Limonene	Mouse	Sensitizing

Respiratory Sensitization

Name	Species	Value
Talc	Human	Not classified

Germ Cell Mutagenicity

Name	Route	Value
Polyethylene Glycol	In Vitro	Not mutagenic
Polyethylene Glycol	In vivo	Not mutagenic
Stearic Acid	In Vitro	Not mutagenic
Talc	In Vitro	Not mutagenic
Talc	In vivo	Not mutagenic
Triethanolamine	In Vitro	Not mutagenic
Triethanolamine	In vivo	Not mutagenic
Synthetic Amorphous Silica, Fumed, Crystalline Free	In Vitro	Not mutagenic
d-Limonene	In Vitro	Not mutagenic
d-Limonene	In vivo	Not mutagenic
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
Cristobalite	In Vitro	Some positive data exist, but the data are not sufficient for classification
Cristobalite	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Polyethylene Glycol	Ingestion	Rat	Not carcinogenic
Stearic Acid	Ingestion	Rat	Not carcinogenic
Talc	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification

Triethanolamine	Dermal	Multiple animal species	Not carcinogenic
Triethanolamine	Ingestion	Mouse	Some positive data exist, but the data are not sufficient for classification
Synthetic Amorphous Silica, Fumed, Crystalline Free	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification
d-Limonene	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
Quartz Silica	Inhalation	Human and animal	Carcinogenic
Cristobalite	Inhalation	Human and animal	Carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Polyethylene Glycol	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,125 mg/kg/day	during gestation
Polyethylene Glycol	Ingestion	Not classified for male reproduction	Rat	NOAEL 5699 +/- 1341 mg/kg/day	5 days
Polyethylene Glycol	Not Specified	Not classified for reproduction and/or development		NOEL N/A	
Polyethylene Glycol	Ingestion	Not classified for development	Mouse	NOAEL 562 mg/animal/day	during gestation
Talc	Ingestion	Not classified for development	Rat	NOAEL 1,600 mg/kg	during organogenesis
Triethanolamine	Ingestion	Not classified for development	Mouse	NOAEL 1,125 mg/kg/day	during organogenesis
Synthetic Amorphous Silica, Fumed, Crystalline Free	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Synthetic Amorphous Silica, Fumed, Crystalline Free	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Synthetic Amorphous Silica, Fumed, Crystalline Free	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
d-Limonene	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	premating & during gestation
d-Limonene	Ingestion	Not classified for development	Multiple animal species	NOAEL 591 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
Polyethylene Glycol	Inhalation	respiratory irritation	Not classified	Rat	NOAEL 1.008 mg/l	2 weeks
Stearic Acid	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
d-Limonene	Ingestion	nervous system	Not classified		NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Polyethylene Glycol	Inhalation	respiratory system	Not classified	Rat	NOAEL 1.008 mg/l	2 weeks
Polyethylene Glycol	Ingestion	kidney and/or bladder | heart | endocrine system | hematopoietic system | liver | nervous system	Not classified	Rat	NOAEL 5,640 mg/kg/day	13 weeks
Stearic Acid	Ingestion	blood	Not classified	Rat	NOAEL Not available	6 weeks
Talc	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Talc	Inhalation	pulmonary fibrosis | respiratory system	Not classified	Rat	NOAEL 18 mg/m3	113 weeks
Triethanolamine	Dermal	kidney and/or bladder	Not classified	Multiple animal species	NOAEL 2,000 mg/kg/day	2 years
Triethanolamine	Dermal	liver	Not classified	Mouse	NOAEL 4,000 mg/kg/day	13 weeks
Triethanolamine	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 1,000 mg/kg/day	2 years
Triethanolamine	Ingestion	liver	Not classified	Guinea pig	NOAEL 1,600 mg/kg/day	24 weeks
Synthetic Amorphous Silica, Fumed, Crystalline Free	Inhalation	respiratory system | silicosis	Not classified	Human	NOAEL Not available	occupational exposure
d-Limonene	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 75 mg/kg/day	103 weeks
d-Limonene	Ingestion	liver	Not classified	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
d-Limonene	Ingestion	heart | endocrine system | bone, teeth, nails, and/or hair | hematopoietic system | immune system | muscles | nervous system | respiratory system	Not classified	Rat	NOAEL 600 mg/kg/day	103 weeks
Quartz Silica	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Cristobalite	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure

Aspiration Hazard

Name	Value
d-Limonene	Aspiration hazard

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

SECTION 12: Ecological information

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

12.1. Toxicity

Acute aquatic hazard:
GHS Acute 3: Harmful to aquatic life.

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

No product test data available

Material	Cas #	Organism	Type	Exposure	Test Endpoint	Test Result
Dimethyl Adipate	627-93-0	Green Algae	Experimental	72 hours	Effect Concentration 50%	>100 mg/l
Dimethyl Adipate	627-93-0	Water flea	Experimental	48 hours	Effect Concentration 50%	72 mg/l
Dimethyl Adipate	627-93-0	Green Algae	Experimental	72 hours	No obs Effect Conc	12.5 mg/l
Polyethylene Glycol	25322-68-3	Atlantic Salmon	Experimental	96 hours	Lethal Concentration 50%	>1,000 mg/l
Dimethyl Glutarate	1119-40-0	Bluegill	Experimental	96 hours	Lethal Concentration 50%	30.9 mg/l
Dimethyl Glutarate	1119-40-0	Green Algae	Experimental	72 hours	Effect Concentration 50%	>85 mg/l
Dimethyl Glutarate	1119-40-0	Green Algae	Experimental	72 hours	No obs Effect Conc	36 mg/l
Bentonite	1302-78-9	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	>=8,000 mg/l
Cellulose	9004-34-6		Data not available or insufficient for classification			
Stearic Acid	57-11-4	Green algae	Estimated	72 hours	Effect Concentration 50%	>100 mg/l
Stearic Acid	57-11-4	Water flea	Estimated	48 hours	Effect Concentration 50%	>100 mg/l
Stearic Acid	57-11-4	Green algae	Estimated	72 hours	No obs Effect Conc	100 mg/l
Stearic Acid	57-11-4	Water flea	Estimated	21 days	No obs Effect Conc	100 mg/l
Talc	14807-96-6		Data not available or insufficient for classification			
Lanolin	8006-54-0		Data not available or insufficient for classification			

Petrolatum	8009-03-8	Fathead Minnow	Estimated	96 hours	Lethal Level 50%	>100 mg/l
Petrolatum	8009-03-8	Water flea	Estimated	48 hours	Effect Level 50%	>10,000 mg/l
Petrolatum	8009-03-8	Green Algae	Estimated	72 hours	No obs Effect Level	100 mg/l
Petrolatum	8009-03-8	Water flea	Estimated	21 days	No obs Effect Level	10 mg/l
Synthetic Amorphous Silica, Fumed, Crystalline Free	112945-52-5	Green Algae	Experimental	72 hours	Effect Concentration 50%	>100 mg/l
Synthetic Amorphous Silica, Fumed, Crystalline Free	112945-52-5	Water flea	Experimental	24 hours	Effect Concentration 50%	>100 mg/l
Synthetic Amorphous Silica, Fumed, Crystalline Free	112945-52-5	Zebra Fish	Experimental	96 hours	Lethal Concentration 50%	>100 mg/l
Synthetic Amorphous Silica, Fumed, Crystalline Free	112945-52-5	Green Algae	Experimental	72 hours	No obs Effect Conc	60 mg/l
Triethanolamine	102-71-6	Fathead Minnow	Experimental	96 hours	Lethal Concentration 50%	11,800 mg/l
Triethanolamine	102-71-6	Green algae	Experimental	72 hours	Effect Concentration 50%	512 mg/l
Triethanolamine	102-71-6	Water flea	Experimental	48 hours	Effect Concentration 50%	609.98 mg/l
Triethanolamine	102-71-6	Green Algae	Experimental	72 hours	Effect Concentration 10%	26 mg/l
Triethanolamine	102-71-6	Water flea	Experimental	21 days	No obs Effect Conc	16 mg/l
d-Limonene	5989-27-5	Fathead Minnow	Experimental	96 hours	Lethal Concentration 50%	0.702 mg/l
d-Limonene	5989-27-5	Green Algae	Experimental	72 hours	Effect Concentration 50%	0.32 mg/l
d-Limonene	5989-27-5	Water flea	Experimental	48 hours	Effect Concentration 50%	0.307 mg/l
d-Limonene	5989-27-5	Green Algae	Experimental	72 hours	Effect Concentration 10%	0.174 mg/l
d-Limonene	5989-27-5	Water flea	Experimental	21 days	No obs Effect	0.08 mg/l

					Conc	
Sodium di(2-ethylhexyl) sulfosuccinate	577-11-7	Green Algae	Experimental	72 hours	Effect Concentration 50%	190 mg/l
Sodium di(2-ethylhexyl) sulfosuccinate	577-11-7	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	28 mg/l
Sodium di(2-ethylhexyl) sulfosuccinate	577-11-7	Water flea	Experimental	48 hours	Effect Concentration 50%	19 mg/l
Sodium di(2-ethylhexyl) sulfosuccinate	577-11-7	Green Algae	Experimental	72 hours	No obs Effect Conc	28 mg/l
Sodium di(2-ethylhexyl) sulfosuccinate	577-11-7	Water flea	Experimental	21 days	No obs Effect Conc	7 mg/l
Quartz Silica	14808-60-7	Green Algae	Estimated	72 hours	Effect Concentration 50%	440 mg/l
Quartz Silica	14808-60-7	Water flea	Estimated	48 hours	Effect Concentration 50%	7,600 mg/l
Quartz Silica	14808-60-7	Zebra Fish	Estimated	96 hours	Lethal Concentration 50%	5,000 mg/l
Quartz Silica	14808-60-7	Green Algae	Estimated	72 hours	No obs Effect Conc	60 mg/l
Cristobalite	14464-46-1		Data not available or insufficient for classification			

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Dimethyl Adipate	627-93-0	Estimated Biodegradation	28 days	Dissolv. Organic Carbon Deplet	97 % weight	Other methods
Polyethylene Glycol	25322-68-3	Experimental Biodegradation	28 days	Biological Oxygen Demand	53 % BOD/ThBOD	OECD 301C - MITI (I)
Dimethyl Glutarate	1119-40-0	Experimental Biodegradation	14 days	Biological Oxygen Demand	90 % BOD/ThBOD	OECD 301C - MITI (I)
Bentonite	1302-78-9	Data not availbl-insufficient			N/A	
Cellulose	9004-34-6	Data not availbl-insufficient			N/A	
Stearic Acid	57-11-4	Experimental Biodegradation	28 days	Carbon dioxide evolution	89 % weight	OECD 301B - Mod. Sturm or CO2
Talc	14807-96-6	Data not availbl-			N/A	

		insufficient				
Lanolin	8006-54-0	Data not availbl-insufficient			N/A	
Petrolatum	8009-03-8	Estimated Biodegradation	28 days	Biological Oxygen Demand	31 %BOD/COD	OECD 301F - Manometric Respiro
Synthetic Amorphous Silica, Fumed, Crystalline Free	112945-52-5	Data not availbl-insufficient			N/A	
Triethanolamine	102-71-6	Experimental Biodegradation	19 days	Dissolv. Organic Carbon Deplet	96 % weight	Other methods
d-Limonene	5989-27-5	Experimental Biodegradation	14 days	Biological Oxygen Demand	98 % BOD/ThBOD	OECD 301C - MITI (I)
Sodium di(2-ethylhexyl) sulfosuccinate	577-11-7	Experimental Biodegradation	28 days	Biological Oxygen Demand	66.7 % BOD/ThBOD	OECD 301D - Closed Bottle Test
Quartz Silica	14808-60-7	Data not availbl-insufficient			N/A	
Cristobalite	14464-46-1	Data not availbl-insufficient			N/A	

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Dimethyl Adipate	627-93-0	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	1.4	Other methods
Polyethylene Glycol	25322-68-3	Estimated Bioconcentration		Bioaccumulation Factor	2.3	Est: Bioconcentration factor
Dimethyl Glutarate	1119-40-0	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	0.49	Other methods
Bentonite	1302-78-9	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
Stearic Acid	57-11-4	Estimated BCF - Other	28 days	Bioaccumulation Factor	255	OECD 305E-Bioaccum Fl-thru fis
Talc	14807-96-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Lanolin	8006-54-0	Data not	N/A	N/A	N/A	N/A

		available or insufficient for classification				
Petrolatum	8009-03-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Synthetic Amorphous Silica, Fumed, Crystalline Free	112945-52-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Triethanolamine	102-71-6	Experimental BCF-Carp	42 days	Bioaccumulation Factor	<3.9	Other methods
d-Limonene	5989-27-5	Estimated Bioconcentration		Bioaccumulation Factor	2100	Est: Bioconcentration factor
Sodium di(2-ethylhexyl) sulfosuccinate	577-11-7	Experimental BCF-Carp	42 days	Bioaccumulation Factor	<9.3	Other methods
Quartz Silica	14808-60-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Cristobalite	14464-46-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

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 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.

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