Safety Data Sheet

Document group:	23-5367-0	**Version number:**	3.00
Issue Date:	12/08/2024	**Supersedes date:**	19/04/2024

This Safety Data Sheet has been prepared in accordance with the GHS guidelines & India Hazardous substances (Classification, Labeling & Packaging) Draft Rules 2011.

SECTION 1: Identification

1.1. Product identifier
Perfect It II Rubbing Compound

Product Identification Numbers

IA-2601-0411-1	IA-2601-0412-9	IA-2601-6138-4	IA-2601-6139-2	IA-2601-6476-8
IA-2601-6477-6	IA-2601-6492-5	IA-2601-6493-3	IA-2701-0098-4	

1.2. Recommended use and restrictions on use

Recommended use
Automotive.

1.3. Supplier's details
Address: 3M India Limited, plot-48-51, Electronic city, Hosur road, Bangalore-560100
Telephone: 080-45543000, contact Product EHS team
E Mail: productehs.in@mmm.com
Website: http://solutions.3mindia.co.in

1.4. Emergency telephone number
080-45543000 (Contact hours: 8:00 AM to 5:00 PM)

SECTION 2: Hazard identification

Under MSIHC Rules, information is noted below on flammability, acute toxicity and explosivity relevant to this product. In line with international standards, information on other hazard classes and associated precautionary statements relevant to this product are included as well.

2.1. Classification of the substance or mixture
Skin Corrosion/Irritation: Category 2.
Serious Eye Damage/Irritation: Category 2A
Skin Sensitizer: Category 1A.
Carcinogenicity: Category 2.
Reproductive Toxicity: Category 2.
Specific Target Organ Toxicity (repeated exposure): Category 1.
Specific Target Organ Toxicity (single exposure): Category 3.
Acute Aquatic Toxicity: Category 1.

Chronic Aquatic Toxicity: Category 1.

2.2. Label elements
Signal Word
Danger

Symbols
Exclamation mark | Health Hazard | Environment |

Pictograms

HAZARD STATEMENTS:

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure: respiratory system.
H410	Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS
General:

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

Prevention:

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280E	Wear protective gloves.

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.
P333 + P313	If skin irritation or rash occurs: 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	CAS Nbr	% by Wt
Water	7732-18-5	25 - 65
Silicon dioxide	7631-86-9	5 - 40
Glycerol	56-81-5	< 10
Kaolinite	1318-74-7	1 - 10
White mineral oil	8042-47-5	1 - 10
C10-13-iso-Alkanes	64742-47-8	1 - 10
OCTADECANOIC ACID	112-80-1	< 3
Sorbitan monostearate, ethoxylated	9005-67-8	0.1 - 2
LINOLEIC ACID	60-33-3	0.1 - 2
Illite	12173-60-3	0.1 - 2
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	< 1
Diethanolamine	111-42-2	< 0.5

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

Irritating to the respiratory tract (coughing, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain). Allergic skin reaction (redness, swelling, blistering, and itching). 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 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
Hydrocarbons.	During combustion.

Carbon monoxide.	During combustion.
Carbon dioxide.	During combustion.
Irritant vapours or gases.	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 dykes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up
Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. 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/vapours/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. Use personal protective equipment (eg. gloves, respirators…) as required.

7.2. Conditions for safe storage including any incompatibilities
Store in a well-ventilated place. Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from heat. Store away from acids. Store away from strong bases.

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	CAS Nbr	Agency	Limit type	Additional comments
Diethanolamine	111-42-2	ACGIH	TWA(inhalable fraction and vapor):1 mg/m3	A3: Confirmed animal carcin., Danger of cutaneous absorption
Aluminum, insoluble compounds	1318-74-7	ACGIH	TWA(respirable fraction):1 mg/m3	A4: Not class. as human carcin

JET FUELS (NON-AEROSOL), AS TOTAL HYDROCARBON VAPOR	64742-47-8	ACGIH	TWA(as total hydrocarbon vapor, non-aerosol):200 mg/m3	A3: Confirmed animal carcin., SKIN
Kerosine (petroleum)	64742-47-8	ACGIH	TWA(as total hydrocarbon vapor, non-aerosol):200 mg/m3	A3: Confirmed animal carcin., SKIN
Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles	7631-86-9	ACGIH	TWA(inhalable particulates):10 mg/m3	
Particles (insoluble or poorly soluble) not otherwise specified, respirable particles	7631-86-9	ACGIH	TWA(respirable particles):3 mg/m3	
MINERAL OILS, HIGHLY-REFINED OILS	8042-47-5	ACGIH	TWA(inhalable fraction):5 mg/m3	A4: Not class. as human carcin

ACGIH : American Conference of Governmental Industrial Hygienists
AIHA : American Industrial Hygiene Association
CMRG : Chemical Manufacturer's Recommended Guidelines
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/vapours/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:
Safety glasses with side shields.
Indirect vented goggles.

Skin/hand protection
Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. 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 vapours 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.
Specific Physical Form:	Slurry
Color	Dull White
Odor	Odourless
Odour threshold	*No data available.*
pH	7.5 - 8.5
Melting point/Freezing point: NA	*Not applicable.*
Boiling point/Initial boiling point/Boiling range	102 ºC
Flash point	98 ºC [*Test Method:*Closed Cup]
Evaporation rate	*No data available.*
Flammability	Not applicable.
Flammable Limits(LEL)	*No data available.*
Flammable Limits(UEL)	*No data available.*
Vapour pressure	*No data available.*
Vapor Density and/or Relative Vapor Density	*No data available.*
Density	1.05 - 1.19 g/cm3
Relative density	1.05 - 1.19 [@ 25 ºC] [*Ref Std:*WATER=1]
Water solubility	*No data available.*
Solubility- non-water	*No data available.*
Partition coefficient: n-octanol/water	*No data available.*
Autoignition temperature	*No data available.*
Decomposition temperature	*No data available.*
Kinematic Viscosity	*No data available.*
Volatile organic compounds (VOC)	*No data available.*
Percent volatile	*No data available.*
VOC less H2O & exempt solvents	*No data available.*

Particle Characteristics	*Not applicable.*

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 polymerisation will not occur.

10.4 Conditions to avoid
Heat.

10.5 Incompatible materials
Strong acids.
Strong bases.
Water

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 labelling, 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. 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
Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below).

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.

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	Ingestion		No data available; calculated ATE >5,000 mg/kg
Silicon dioxide	Dermal	Rabbit	LD50 > 5,000 mg/kg
Silicon dioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Silicon dioxide	Ingestion	Rat	LD50 > 5,110 mg/kg
Kaolinite	Dermal		LD50 estimated to be > 5,000 mg/kg
Kaolinite	Ingestion	Human	LD50 > 15,000 mg/kg
White mineral oil	Dermal	Rabbit	LD50 > 2,000 mg/kg
C10-13-iso-Alkanes	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.4 mg/l
White mineral oil	Ingestion	Rat	LD50 > 5,000 mg/kg
C10-13-iso-Alkanes	Dermal	similar compounds	LD50 > 5,000 mg/kg
C10-13-iso-Alkanes	Ingestion	similar compounds	LD50 > 5,000 mg/kg
Glycerol	Dermal	Rabbit	LD50 estimated to be > 5,000 mg/kg
Glycerol	Ingestion	Rat	LD50 > 5,000 mg/kg
OCTADECANOIC ACID	Dermal	Guinea pig	LD50 > 3,000 mg/kg
OCTADECANOIC ACID	Ingestion	Rat	LD50 57,000 mg/kg
LINOLEIC ACID	Dermal	Guinea pig	LD50 > 18,000 mg/kg
LINOLEIC ACID	Ingestion	Rat	LD50 > 3,200 mg/kg
Sorbitan monostearate, ethoxylated	Dermal	Rat	LD50 > 2,000 mg/kg
Sorbitan monostearate, ethoxylated	Ingestion	Rat	LD50 > 60,000 mg/kg
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Dermal	Rabbit	LD50 87 mg/kg
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.171 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Ingestion	Rat	LD50 40 mg/kg
Diethanolamine	Dermal	Rabbit	LD50 8,180 mg/kg
Diethanolamine	Ingestion	Rat	LD50 1,410 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Silicon dioxide	Rabbit	No significant irritation
Kaolinite	Professional judgement	No significant irritation
C10-13-iso-Alkanes	similar compounds	Mild irritant
White mineral oil	Rabbit	No significant irritation
Glycerol	Rabbit	No significant irritation
OCTADECANOIC ACID	Rabbit	Minimal irritation
Sorbitan monostearate, ethoxylated	Rabbit	No significant irritation
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Rabbit	Corrosive
Diethanolamine	Rabbit	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
Silicon dioxide	Rabbit	No significant irritation

Kaolinite	Professional judgement	No significant irritation
C10-13-iso-Alkanes	similar compounds	No significant irritation
White mineral oil	Rabbit	Mild irritant
Glycerol	Rabbit	No significant irritation
OCTADECANOIC ACID	Rabbit	Mild irritant
Sorbitan monostearate, ethoxylated	Rabbit	No significant irritation
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Rabbit	Corrosive
Diethanolamine	Rabbit	Corrosive

Sensitization:

Skin Sensitisation

Name	Species	Value
Silicon dioxide	Human and animal	Not classified
C10-13-iso-Alkanes	similar compounds	Not classified
White mineral oil	Guinea pig	Not classified
Glycerol	Guinea pig	Not classified
Sorbitan monostearate, ethoxylated	Human	Not classified
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Human and animal	Sensitising
Diethanolamine	Human and animal	Not classified

Photosensitisation

Name	Species	Value
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Human and animal	Not sensitizing

Respiratory Sensitisation

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

Germ Cell Mutagenicity

Name	Route	Value
Silicon dioxide	In Vitro	Not mutagenic
C10-13-iso-Alkanes	In Vitro	Not mutagenic
White mineral oil	In Vitro	Not mutagenic
OCTADECANOIC ACID	In Vitro	Some positive data exist, but the data are not sufficient for classification
Sorbitan monostearate, ethoxylated	In Vitro	Not mutagenic
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	In vivo	Not mutagenic
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	In Vitro	Some positive data exist, but the data are not sufficient for classification
Diethanolamine	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Silicon dioxide	Not specified.	Mouse	Some positive data exist, but the data are not sufficient for classification
Kaolinite	Inhalation	Multiple animal species	Not carcinogenic
White mineral oil	Dermal	Mouse	Not carcinogenic
White mineral oil	Inhalation	Multiple animal species	Not carcinogenic
Glycerol	Ingestion	Mouse	Some positive data exist, but the data are not sufficient for classification
OCTADECANOIC ACID	Dermal	Mouse	Not carcinogenic
OCTADECANOIC ACID	Ingestion	Rat	Not carcinogenic
OCTADECANOIC ACID	Not specified.	Multiple animal species	Not carcinogenic
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Dermal	Mouse	Not carcinogenic
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Ingestion	Rat	Not carcinogenic
Diethanolamine	Dermal	Mouse	Carcinogenic.

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Silicon dioxide	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Silicon dioxide	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Silicon dioxide	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
White mineral oil	Ingestion	Not classified for female reproduction	Rat	NOAEL 4,350 mg/kg/day	13 weeks
White mineral oil	Ingestion	Not classified for male reproduction	Rat	NOAEL 4,350 mg/kg/day	13 weeks
White mineral oil	Ingestion	Not classified for development	Rat	NOAEL 4,350 mg/kg/day	during gestation
Glycerol	Ingestion	Not classified for female reproduction	Rat	NOAEL 2,000 mg/kg/day	2 generation
Glycerol	Ingestion	Not classified for male reproduction	Rat	NOAEL 2,000 mg/kg/day	2 generation
Glycerol	Ingestion	Not classified for development	Rat	NOAEL 2,000 mg/kg/day	2 generation
Sorbitan monostearate, ethoxylated	Ingestion	Not classified for male reproduction	Rat	NOAEL 10,000 mg/kg/day	3 generation
Sorbitan monostearate, ethoxylated	Ingestion	Not classified for female reproduction	Rat	NOAEL 10,000 mg/kg/day	3 generation
Sorbitan monostearate, ethoxylated	Ingestion	Not classified for development	Rat	NOAEL 7,693 mg/kg/day	during organogenesis
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Ingestion	Not classified for female reproduction	Rat	NOAEL 10 mg/kg/day	2 generation

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Ingestion	Not classified for male reproduction	Rat	NOAEL 10 mg/kg/day	2 generation
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Ingestion	Not classified for development	Rat	NOAEL 15 mg/kg/day	during organogenesis
Diethanolamine	Ingestion	Not classified for male reproduction	Rat	NOAEL 128 mg/kg/day	1 generation
Diethanolamine	Dermal	Not classified for development	Rabbit	NOAEL 100 mg/kg/day	during organogenesis
Diethanolamine	Inhalation	Not classified for development	Rat	NOAEL 0.05 mg/l	during organogenesis
Diethanolamine	Ingestion	Toxic to female reproduction	Rat	NOAEL 38 mg/kg/day	1 generation
Diethanolamine	Ingestion	Toxic to development	Rat	NOAEL 38 mg/kg/day	1 generation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Inhalation	respiratory irritation	May cause respiratory irritation	similar health hazards	NOAEL Not available	
Diethanolamine	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL not available	
Diethanolamine	Ingestion	kidney and/or bladder	May cause damage to organs	Rat	NOAEL 200 mg/kg	not applicable
Diethanolamine	Ingestion	central nervous system depression	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 200 mg/kg	not applicable
Diethanolamine	Ingestion	liver	Not classified	Rat	NOAEL 1,600 mg/kg	not applicable

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Silicon dioxide	Inhalation	respiratory system | silicosis	Not classified	Human	NOAEL Not available	occupational exposure
Kaolinite	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL NA	occupational exposure
Kaolinite	Inhalation	pulmonary fibrosis	Not classified	Rat	NOAEL Not available	
White mineral oil	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 1,381 mg/kg/day	90 days
White mineral oil	Ingestion	liver | immune system	Not classified	Rat	NOAEL 1,336 mg/kg/day	90 days
Glycerol	Inhalation	respiratory system | heart | liver | kidney and/or bladder	Not classified	Rat	NOAEL 3.91 mg/l	14 days
Glycerol	Ingestion	endocrine system | hematopoietic system | liver | kidney and/or bladder	Not classified	Rat	NOAEL 10,000 mg/kg/day	2 years
OCTADECANOIC ACID	Ingestion	liver | immune system	Not classified	Rat	NOAEL 2,250 mg/kg/day	108 weeks
OCTADECANOIC ACID	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 2,550 mg/kg/day	108 weeks

Sorbitan monostearate, ethoxylated	Ingestion	gastrointestinal tract | liver | hematopoietic system	Not classified	Rat	NOAEL 12,500 mg/kg/day	2 years
Diethanolamine	Dermal	hematopoietic system	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 32 mg/kg/day	13 weeks
Diethanolamine	Dermal	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 8 mg/kg/day	2 years
Diethanolamine	Dermal	liver	Not classified	Rat	NOAEL 500 mg/kg/day	13 weeks
Diethanolamine	Inhalation	liver | kidney and/or bladder	Not classified	Rat	NOAEL 0.03 mg/l	13 weeks
Diethanolamine	Ingestion	hematopoietic system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 14 mg/kg/day	13 weeks
Diethanolamine	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 57 mg/kg/day	13 weeks
Diethanolamine	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL not available	13 weeks
Diethanolamine	Ingestion	liver	Not classified	Rat	NOAEL 436 mg/kg/day	13 weeks

Aspiration Hazard

Name	Value
C10-13-iso-Alkanes	Aspiration hazard
White mineral oil	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 labelling, 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 1: Very toxic to aquatic life.

Chronic aquatic hazard:
GHS Chronic 1: Very toxic to aquatic life with long lasting effects.

No product test data available.

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
Silicon dioxide	7631-86-9	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Glycerol	56-81-5	Bacteria	Experimental	16 hours	NOEC	10,000 mg/l
Glycerol	56-81-5	Rainbow trout	Experimental	96 hours	LC50	54,000 mg/l
Glycerol	56-81-5	Water flea	Experimental	48 hours	LC50	1,955 mg/l
Kaolinite	1318-74-7	N/A	Data not available or insufficient for classification	N/A	N/A	N/A

C10-13-iso-Alkanes	64742-47-8	Green algae	Analogous Compound	72 hours	EL50	>1,000 mg/l
C10-13-iso-Alkanes	64742-47-8	Water flea	Analogous Compound	48 hours	EL50	>1,000 mg/l
C10-13-iso-Alkanes	64742-47-8	Rainbow trout	Experimental	96 hours	LL50	>788,000 mg/l
C10-13-iso-Alkanes	64742-47-8	Scud	Experimental	96 hours	LL50	>10,000 mg/l
C10-13-iso-Alkanes	64742-47-8	Green algae	Analogous Compound	72 hours	NOEL	1,000 mg/l
C10-13-iso-Alkanes	64742-47-8	Water flea	Analogous Compound	21 days	NOEL	>1 mg/l
White mineral oil	8042-47-5	Water flea	Analogous Compound	48 hours	EL50	>100 mg/l
White mineral oil	8042-47-5	Bluegill	Experimental	96 hours	LL50	>100 mg/l
White mineral oil	8042-47-5	Green algae	Analogous Compound	72 hours	NOEL	100 mg/l
White mineral oil	8042-47-5	Water flea	Analogous Compound	21 days	NOEL	>100 mg/l
OCTADECANOIC ACID	112-80-1	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Illite	12173-60-3	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
LINOLEIC ACID	60-33-3	Water flea	Experimental	48 hours	LC50	2.8 mg/l
LINOLEIC ACID	60-33-3	Water flea	Experimental	21 days	NOEC	2.2 mg/l
Sorbitan monostearate, ethoxylated	9005-67-8	Copepod	Analogous Compound	48 hours	LL50	>10,000 mg/l
Sorbitan monostearate, ethoxylated	9005-67-8	Green algae	Analogous Compound	72 hours	EL50	58.84 mg/l
Sorbitan monostearate, ethoxylated	9005-67-8	Zebra Fish	Analogous Compound	96 hours	LL50	>100 mg/l
Sorbitan monostearate, ethoxylated	9005-67-8	Green algae	Analogous Compound	72 hours	EC10	19.05 mg/l
Sorbitan monostearate, ethoxylated	9005-67-8	Water flea	Analogous Compound	21 days	NOEL	10 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Activated sludge	Experimental	3 hours	NOEC	0.91 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Bacteria	Experimental	16 hours	EC50	5.7 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Copepod	Experimental	48 hours	EC50	0.007 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Diatom	Experimental	72 hours	ErC50	0.0199 mg/l
Reaction mass of: 5-chloro-2-methyl-	55965-84-9	Green algae	Experimental	72 hours	ErC50	0.027 mg/l

4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)						
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Rainbow trout	Experimental	96 hours	LC50	0.19 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Sheepshead Minnow	Experimental	96 hours	LC50	0.3 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Water flea	Experimental	48 hours	EC50	0.099 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Diatom	Experimental	48 hours	NOEC	0.00049 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Fathead minnow	Experimental	36 days	NOEL	0.02 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Green algae	Experimental	72 hours	NOEC	0.004 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Water flea	Experimental	21 days	NOEC	0.004 mg/l
Diethanolamine	111-42-2	Fathead minnow	Experimental	96 hours	LC50	100 mg/l
Diethanolamine	111-42-2	Green algae	Experimental	72 hours	EC50	9.5 mg/l
Diethanolamine	111-42-2	Water flea	Experimental	48 hours	LC50	2.15 mg/l
Diethanolamine	111-42-2	Green algae	Experimental	72 hours	NOEC	0.6 mg/l
Diethanolamine	111-42-2	Water flea	Experimental	21 days	NOEC	0.78 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Silicon dioxide	7631-86-9	Data not available-insufficient	N/A	N/A	N/A	N/A
Glycerol	56-81-5	Experimental Biodegradation	14 days	BOD	63 %BOD/ThOD	OECD 301C - MITI test (I)
Kaolinite	1318-74-7	Data not available-insufficient	N/A	N/A	N/A	N/A

C10-13-iso-Alkanes	64742-47-8	Experimental Biodegradation	28 days	BOD	22 %BOD/ThOD	OECD 301F - Manometric respirometry
White mineral oil	8042-47-5	Experimental Biodegradation	28 days	CO2 evolution	0 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2
OCTADECANOIC ACID	112-80-1	Experimental Biodegradation	28 days	BOD	78 %BOD/ThOD	OECD 301C - MITI test (I)
Illite	12173-60-3	Data not available-insufficient	N/A	N/A	N/A	N/A
LINOLEIC ACID	60-33-3	Experimental Biodegradation		Half-life (t 1/2)	30 hours (t 1/2)	
LINOLEIC ACID	60-33-3	Experimental Biodegradation	28 days	BOD	80 %BOD/ThOD	OECD 301C - MITI test (I)
Sorbitan monostearate, ethoxylated	9005-67-8	Analogous Compound Biodegradation	28 days	CO2 evolution	61 %CO2 evolution/THCO2 evolution	ISO 14593 Inorg C Headspace
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Analogous Compound Biodegradation	29 days	CO2 evolution	62 %CO2 evolution/THCO2 evolution (does not pass 10-day window)	OECD 301B - Modified sturm or CO2
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	> 60 days (t 1/2)	
Diethanolamine	111-42-2	Experimental Biodegradation	10 days	BOD	72 %BOD/ThOD	OECD 301D - Closed bottle test
Diethanolamine	111-42-2	Experimental Biodegradation	9 days	Dissolv. Organic Carbon Deplet	98 %removal of DOC	OECD 302C - Modified MITI (II)

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Silicon dioxide	7631-86-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Glycerol	56-81-5	Experimental Bioconcentration		Log Kow	-1.76	
Kaolinite	1318-74-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
C10-13-iso-Alkanes	64742-47-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
White mineral oil	8042-47-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
OCTADECANOIC ACID	112-80-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Illite	12173-60-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
LINOLEIC ACID	60-33-3	Modeled BCF - Fish		Bioaccumulation factor	13	Catalogic™
LINOLEIC ACID	60-33-3	Experimental Bioconcentration		Log Kow	7.05	
Sorbitan monostearate, ethoxylated	9005-67-8	Experimental Bioconcentration		Log Kow	0.03	
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-	55965-84-9	Analogous Compound BCF - Fish	28 days	Bioaccumulation factor	54	OECD305-Bioconcentration

one and 2-methyl-4-isothiazolin-3-one (3:1)						
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Analogous Compound Bioconcentration		Log Kow	0.4	
Diethanolamine	111-42-2	Experimental Bioconcentration		Log Kow	-2.18	OECD 107 log Kow shke flsk mtd

12.4. Mobility in soil
Please contact manufacturer for more details

12.5 Other Adverse effects
No information available.

SECTION 13: Disposal considerations

13.1. Disposal methods
Dispose of contents/ container in accordance with the local/regional/national/international regulations.

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

SECTION 14: Transport Information

Air Transport (IATA)Regulations

UN No UN3082
Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Kathon)
Hazard Classs/Division 9
Subsidiary Risk Not applicable
Packing Group: III

Marine Transport (IMDG)
UN No UN3082
Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Kathon)
Hazard Classs/Division 9
Subsidiary Risk Not applicable
Packing Group: III
Environmental Hazards: Not applicable

SECTION 15: Regulatory information

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

Global inventory status
Contact 3M for more information.

Applicable Environmental, Health and Safety Regulations
The Manufacture, Storage and Import of Hazardous Chemical Rules, 1989

Hazardous Waste(Management , Handling & Transboundary) Rules, 2008

The following ingredients are listed as hazardous on Part II of Schedule I of the India Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) rules
None.

The following ingredients are classified as hazardous based on the criteria listed under Part I of Schedule I of the India Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) rules:
The Product is classified as Non-Hazardous.

SECTION 16: Other information

NFPA Hazard Classification

Health: 2 **Flammability:** 1 **Instability:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Revision information:
Section 14: Packing group (IMO) information was modified.
Section 8: Occupational exposure limit table information was modified.
Section 9: Flammability (solid, gas) information information was deleted.
Section 09: Flammability information information was added.
Section 09: Kinematic Viscosity information information was added.
Section 09: Particle Characteristics N/A information was added.
Section 09: Viscosity information was deleted.
Section 12: Component ecotoxicity information information was modified.
Section 12: Persistence and Degradability information information was modified.
Section 12:Bioccumulative potential information information was modified.
Section 14: IATA transport hazard classes information was modified.
Section 14: IMO transport hazard classes information was modified.
Section 14: Packing group (IATA) information was modified.
Section 14: Proper Shipping Name (IATA) information was modified.
Section 14: Proper Shipping Name (IMO) information was modified.
Section 14: Proper Shipping Name n.o.s. ingredients information was added.
Section 14: Transportation Information information was deleted.
Section 14: UN Number (IATA) information was modified.
Section 14: UN Number (IMO) information was modified.

DISCLAIMER: The information in this Safety Data Sheet (SDS) 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 SDS or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own evaluation to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into India, you are responsible to comply with all applicable regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration/notification.

3M India SDSs are available at http://solutions.3mindia.co.in