



Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier

3M™ Defoamer

Product Identification Numbers

ID Number	UPC	ID Number	UPC
70-0711-5629-6	000-48011-34768-4	70-0716-8301-8	000-48011-34768-4

1.2. Recommended use and restrictions on use

Recommended use

Defoamer. A concentrated product designed to minimize or eliminate foaming problems of cleaners associated with recovery tanks.

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Commercial Solutions Division
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

2.1. Hazard classification

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

2.2. Label elements

Signal word

Not applicable.

Symbols

Not applicable.

Pictograms

Not applicable.

2.3. Hazards not otherwise classified

None.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
WATER	7732-18-5	60 - 100 Trade Secret *
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	67762-90-7	1 - 5 Trade Secret *
Sodium Hydroxide	1310-73-2	0.01 - 1 Trade Secret *
SODIUM LAURYL SULFATE	151-21-3	< 0.1 Trade Secret *
5-CHLORO-2-METHYL-4-ISOTHIAZOLINE-3-ONE	26172-55-4	< 0.1 Trade Secret *
2-METHYL-4-ISOTHIAZOLINE-3-ONE	2682-20-4	< 0.1 Trade Secret *

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First aid measures**4.1. Description of first aid measures****Inhalation:**

Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:

Wash with soap and water. If signs/symptoms develop, get medical attention.

Eye Contact:

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

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

Not applicable

SECTION 5: Fire-fighting measures**5.1. Suitable extinguishing media**

Material will not burn. Non-combustible. Use a fire fighting agent suitable for surrounding fire.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products**Substance**

Formaldehyde

Carbon monoxide

Carbon dioxide

Condition

During Combustion

During Combustion

During Combustion

5.3. Special protective actions for fire-fighters

No unusual fire or explosion hazards are anticipated.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate area. Ventilate the area with fresh air. Observe precautions from other sections.

6.2. Environmental precautions

Avoid release to the environment.

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.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational exposure limits**

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Sodium Hydroxide	1310-73-2	Amer Conf of Gov. Indust. Hyg.	CEIL:2 mg/m ³	
Sodium Hydroxide	1310-73-2	Chemical Manufacturer Rec Guid	TWA:2 mg/m ³	
Sodium Hydroxide	1310-73-2	US Dept of Labor - OSHA	TWA:2 mg/m ³	
5-CHLORO-2-METHYL-4-ISOTHIAZOLINE-3-ONE	26172-55-4	Chemical Manufacturer Rec Guid	TWA:0.076 mg/m ³ ;STEL:0.23 mg/m ³	Sensitizer
2-METHYL-4-ISOTHIAZOLINE-3-ONE	2682-20-4	Chemical Manufacturer Rec Guid	TWA:1.5 mg/m ³ ;STEL:4.5 mg/m ³	Sensitizer
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	67762-90-7	Chemical Manufacturer Rec Guid	CEIL:5 mg/m ³	
SILICA, AMORPHOUS	67762-90-7	US Dept of Labor - OSHA	TWA concentration:0.8 mg/m ³ ;TWA:20 millions of particles/cu. ft.	

Amer Conf of Gov. Indust. Hyg. : American Conference of Governmental Industrial Hygienists

American Indust. Hygiene Assoc : American Industrial Hygiene Association

Chemical Manufacturer Rec Guid : Chemical Manufacturer's Recommended Guidelines

US Dept of Labor - OSHA : United States Department of Labor - Occupational Safety and Health Administration

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: Safety Glasses with side shields

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Gloves made from the following material(s) are recommended: Nitrile Rubber

Respiratory protection

None required.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

General Physical Form:	Liquid
Specific Physical Form:	Liquid
Odor, Color, Grade:	Opaque white, light fragrance
Odor threshold	<i>No Data Available</i>
pH	7 - 8
Melting point	<i>Not Applicable</i>
Boiling Point	212 °F
Flash Point	No flash point
Evaporation rate	< 1 [<i>Ref Std: WATER=1</i>]
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	<i>Not Applicable</i>
Flammable Limits(UEL)	<i>Not Applicable</i>
Vapor Pressure	<i>No Data Available</i>
Vapor Density	> 1 [<i>Ref Std: AIR=1</i>]
Density	1 g/ml
Specific Gravity	1 [<i>Ref Std: WATER=1</i>]
Solubility in Water	Complete
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	<i>Not Applicable</i>
Decomposition temperature	<i>No Data Available</i>
Viscosity	< 100 centipoise
Volatile Organic Compounds	< 0.01 % weight
Percent volatile	< 98 % weight
VOC Less H2O & Exempt Solvents	< 10 g/l

SECTION 10: Stability and reactivity**10.1. Reactivity**

This material is considered to be non reactive under normal use conditions.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products**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:

No health effects are expected.

Skin Contact:

Contact with the skin during product use is not expected to result in significant irritation.

Eye Contact:

Contact with the eyes during product use is not expected to result in significant irritation.

Ingestion:

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

Toxicological Data

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

Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Dermal	Rabbit	LD50 > 5,000 mg/kg
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Ingestion	Rat	LD50 > 5,110 mg/kg
SODIUM LAURYL SULFATE	Inhalation-Dust/Mist		LC50 > 0.975 mg/l

SODIUM LAURYL SULFATE	Dermal	Rabbit	LD50 580 mg/kg
SODIUM LAURYL SULFATE	Ingestion	Rat	LD50 1,650 mg/kg
5-CHLORO-2-METHYL-4-ISOTHIAZOLINE-3-ONE	Dermal	Rabbit	LD50 87 mg/kg
5-CHLORO-2-METHYL-4-ISOTHIAZOLINE-3-ONE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.33 mg/l
5-CHLORO-2-METHYL-4-ISOTHIAZOLINE-3-ONE	Ingestion	Rat	LD50 40 mg/kg
2-METHYL-4-ISOTHIAZOLINE-3-ONE	Dermal	Rabbit	LD50 87 mg/kg
2-METHYL-4-ISOTHIAZOLINE-3-ONE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.33 mg/l
2-METHYL-4-ISOTHIAZOLINE-3-ONE	Ingestion	Rat	LD50 40 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Rabbit	No significant irritation
Sodium Hydroxide	Rabbit	Corrosive
SODIUM LAURYL SULFATE	Rabbit	Irritant
5-CHLORO-2-METHYL-4-ISOTHIAZOLINE-3-ONE	Rabbit	Corrosive
2-METHYL-4-ISOTHIAZOLINE-3-ONE	Rabbit	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Rabbit	No significant irritation
Sodium Hydroxide	Rabbit	Corrosive
SODIUM LAURYL SULFATE	Rabbit	Corrosive
5-CHLORO-2-METHYL-4-ISOTHIAZOLINE-3-ONE	Rabbit	Corrosive
2-METHYL-4-ISOTHIAZOLINE-3-ONE	Rabbit	Corrosive

Skin Sensitization

Name	Species	Value
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Human and animal	Not sensitizing
Sodium Hydroxide	Human	Not sensitizing
5-CHLORO-2-METHYL-4-ISOTHIAZOLINE-3-ONE	Human and animal	Sensitizing
2-METHYL-4-ISOTHIAZOLINE-3-ONE	Human and animal	Sensitizing

Photosensitization

Name	Species	Value
5-CHLORO-2-METHYL-4-ISOTHIAZOLINE-3-ONE	Human and animal	Not sensitizing
2-METHYL-4-ISOTHIAZOLINE-3-ONE	Human and animal	Not sensitizing

Respiratory Sensitization

Name	Species	Value

Germ Cell Mutagenicity

Name	Route	Value
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	In Vitro	Not mutagenic
Sodium Hydroxide	In Vitro	Not mutagenic
5-CHLORO-2-METHYL-4-ISOTHIAZOLINE-3-ONE	In vivo	Not mutagenic
5-CHLORO-2-METHYL-4-ISOTHIAZOLINE-3-ONE	In Vitro	Some positive data exist, but the data are not sufficient for classification
2-METHYL-4-ISOTHIAZOLINE-3-ONE	In vivo	Not mutagenic

2-METHYL-4-ISOTHIAZOLINE-3-ONE	In Vitro	Some positive data exist, but the data are not sufficient for classification
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Carcinogenicity

Name	Route	Species	Value
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification
5-CHLORO-2-METHYL-4-ISOTHIAZOLINE-3-ONE	Dermal	Mouse	Not carcinogenic
5-CHLORO-2-METHYL-4-ISOTHIAZOLINE-3-ONE	Ingestion	Rat	Not carcinogenic
2-METHYL-4-ISOTHIAZOLINE-3-ONE	Dermal	Mouse	Not carcinogenic
2-METHYL-4-ISOTHIAZOLINE-3-ONE	Ingestion	Rat	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Ingestion	Not toxic to development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
5-CHLORO-2-METHYL-4-ISOTHIAZOLINE-3-ONE	Ingestion	Not toxic to female reproduction	Rat	NOAEL 10 mg/kg/day	2 generation
5-CHLORO-2-METHYL-4-ISOTHIAZOLINE-3-ONE	Ingestion	Not toxic to male reproduction	Rat	NOAEL 10 mg/kg/day	2 generation
5-CHLORO-2-METHYL-4-ISOTHIAZOLINE-3-ONE	Ingestion	Not toxic to development	Rat	NOAEL 15 mg/kg/day	during organogenesis
2-METHYL-4-ISOTHIAZOLINE-3-ONE	Ingestion	Not toxic to female reproduction	Rat	NOAEL 10 mg/kg/day	2 generation
2-METHYL-4-ISOTHIAZOLINE-3-ONE	Ingestion	Not toxic to male reproduction	Rat	NOAEL 10 mg/kg/day	2 generation
2-METHYL-4-ISOTHIAZOLINE-3-ONE	Ingestion	Not toxic to development	Rat	NOAEL 15 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
Sodium Hydroxide	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	
SODIUM LAURYL SULFATE	Inhalation	respiratory irritation	May cause respiratory irritation	similar health hazards	NOAEL Not available	
5-CHLORO-2-METHYL-4-ISOTHIAZOLINE-3-ONE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
2-METHYL-4-ISOTHIAZOLINE-3-ONE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Inhalation	respiratory system silicosis	All data are negative	Human	NOAEL Not available	occupational exposure

Aspiration Hazard

Name	Value

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

Ecotoxicological information

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

Chemical fate information

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

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. Dispose of waste product in a permitted industrial waste facility. Empty and clean product containers may be disposed as non-hazardous waste. Consult your specific regulations and service providers to determine available options and requirements.

EPA Hazardous Waste Number (RCRA): Not regulated

SECTION 14: Transport Information

Not regulated per U.S. DOT, IATA or IMO.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M transportation classifications are based on product formulation, packaging, 3M policies and 3M 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 original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

SECTION 15: Regulatory information

15.1. US Federal Regulations

311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - No

This material contains a chemical which requires export notification under TSCA Section 12[b]:

<u>Ingredient (Category if applicable)</u>	<u>C.A.S. No</u>	<u>Regulation</u>	<u>Status</u>
2-METHYL-4-ISOTHIAZOLINE-3-ONE	2682-20-4	Toxic Substances Control Act (TSCA) 5 SNUR or Consent Order Chemicals	Proposed

This material contains a chemical subject to a proposed EPA Significant New Use Rule (TSCA Section 5)

<u>Ingredient (Category if applicable)</u>	<u>C.A.S. No</u>	<u>Reference</u>
2-METHYL-4-ISOTHIAZOLINE-3-ONE	2682-20-4	62 FR 34421

15.2. State Regulations

15.3. Chemical Inventories

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 material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of the Korean Toxic Chemical Control Law. Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of Japan Chemical Substance Control Law. Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information.

The components of this product are in compliance with the chemical notification requirements of TSCA.

15.4. International Regulations

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification

Health: 0 Flammability: 0 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.

HMIS Hazard Classification

Health: 1 Flammability: 0 Physical Hazard: 0 Personal Protection: X - See PPE section.

Hazardous Material Identification System (HMIS® III) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® III ratings are to be used with a fully implemented HMIS® III program. HMIS® is a registered mark of the American Coatings Association (ACA).

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