



Safety Data Sheet

Copyright, 2016, 3M Company.

All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

Document Group:	28-5732-4	Version Number:	1.01
Issue Date:	25/11/2016	Supersedes Date:	17/12/2015

This Safety Data Sheet has been prepared in accordance with the Notification of Ministry of Industry, System of Hazardous Classification and Communication B.E.2555.

SECTION 1: Identification

1.1. Product identifier

3M Disinfectant Floor Cleaner

Company: 3M Thailand Ltd.

Address: 12th Floor, Serm-Mitr Tower 159 Asoke Road (Sukhumvit 21) Bangkok 10110 Thailand

Product Identification Numbers

XN-0020-2483-6

1.2. Recommended use and restrictions on use

Recommended use

Floor cleaning and surface disinfectant.

1.3. Supplier's details

ADDRESS: 3M Thailand Limited, Sukhumvit 21, Wattana, Bangkok 10110, Thailand

Telephone: 66(0)22608577

E Mail: 3MThailand@mmm.com

Website: <http://www.3M.com/TH>

1.4. Emergency telephone number

66-2-2608577

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Serious Eye Damage/Irritation: Category 1.

Skin Corrosion/Irritation: Category 2.

Carcinogenicity: Category 1.

Acute Aquatic Toxicity: Category 1.

Chronic Aquatic Toxicity: Category 3.

2.2. Label elements

Signal word

Danger

3M Disinfectant Floor Cleaner

Symbols

Corrosion | Health Hazard | Environment |

Pictograms



Hazard Statements

H318	Causes serious eye damage.
H315	Causes skin irritation.
H350	May cause cancer.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

General:

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

Prevention:

P201	Obtain special instructions before use.
P280A	Wear eye/face protection.
P281	Use personal protective equipment as required.
P273	Avoid release to the environment.

Response:

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P310	Immediately call a POISON CENTER or doctor/physician.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
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
Water	7732-18-5	80 - 100
Benzalkonium Chloride	68424-85-1	1 - 5
Ethoxylate Alcohol	68131-39-5	1 - 5

3M Disinfectant Floor Cleaner

Fragrance	Trade Secret	< 1
-----------	--------------	-----

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 for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately 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.

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

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.

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. Use personal protective equipment (gloves, respirators, etc.) as required.

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

No occupational exposure limit values exist for any of the components listed in Section 3 of this SDS.

8.2. Exposure controls

8.2.1. Engineering controls

No engineering controls required.

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:

Full Face Shield

Indirect Vented Goggles

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

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

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

Respiratory protection

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

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

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance/Odor	Rose scented pink viscous
Odor threshold	No Data Available
pH	8 - 10
Melting point/Freezing point	Not Applicable
Boiling point/Initial boiling point/Boiling range	100 °C [Test Method: Estimated]
Flash Point	Flash point > 93 °C (200 °F) [Test Method: Estimated]
Evaporation rate	No Data Available
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	No Data Available
Flammable Limits(UEL)	No Data Available
Vapor Pressure	No Data Available
Vapor Density	No Data Available
Density	0.98 - 1.02 g/cm ³
Relative Density	0.98 - 1.02 [Ref Std: WATER=1]
Water solubility	Complete
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	No Data Available

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

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be

reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation:

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

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.

Eye Contact:

Corrosive (Eye Burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Ingestion:

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

Additional Health Effects:

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	Ingestion		No data available; calculated ATE > 5,000 mg/kg
Ethoxylate Alcohol	Dermal	Rat	LD50 5,000 mg/kg
Ethoxylate Alcohol	Ingestion	Rat	LD50 1,200 mg/kg
Benzalkonium Chloride	Dermal	Rabbit	LD50 645 mg/kg
Benzalkonium Chloride	Ingestion	Rat	LD50 366 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

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

Serious Eye Damage/Irritation

Name	Species	Value
Ethoxylate Alcohol	Not available	Corrosive

Skin Sensitization

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

Respiratory Sensitization

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

3M Disinfectant Floor Cleaner

Germ Cell Mutagenicity

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

Carcinogenicity

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

Reproductive Toxicity

Reproductive and/or Developmental Effects

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

Target Organ(s)

Specific Target Organ Toxicity - single exposure

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

Specific Target Organ Toxicity - repeated exposure

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

Aspiration Hazard

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

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 1: Very toxic to aquatic life.

Chronic aquatic hazard:

GHS Chronic 3: Harmful to aquatic life with long lasting effects

No product test data available

Material	Cas #	Organism	Type	Exposure	Test Endpoint	Test Result
Ethoxylate Alcohol	68131-39-5	Green algae	Experimental	72 hours	Effect Concentration 50%	0.85 mg/l
Ethoxylate Alcohol	68131-39-5	Fathead Minnow	Experimental	96 hours	Lethal Concentration 50%	0.48 mg/l
Ethoxylate Alcohol	68131-39-5	Diatom	Experimental	72 hours	Effect Concentration 50%	1 mg/l
Ethoxylate	68131-39-5	Water flea	Experimental	48 hours	Effect	0.302 mg/l

3M Disinfectant Floor Cleaner

Alcohol					Concentration 50%	
Ethoxylate Alcohol	68131-39-5	Water flea	Experimental	21 days	No obs Effect Conc	0.083 mg/l
Ethoxylate Alcohol	68131-39-5	Diatom	Experimental	72 hours	No obs Effect Conc	0.32 mg/l
Ethoxylate Alcohol	68131-39-5	Green Algae	Experimental	72 hours	No obs Effect Conc	0.5 mg/l
Benzalkonium Chloride	68424-85-1	Diatom	Experimental	96 hours	Effect Concentration 50%	0.089 mg/l
Benzalkonium Chloride	68424-85-1	Green Algae	Experimental	72 hours	Effect Concentration 50%	0.049 mg/l
Benzalkonium Chloride	68424-85-1	Mysid Shrimp	Experimental	96 hours	Lethal Concentration 50%	0.092 mg/l
Benzalkonium Chloride	68424-85-1	Water flea	Experimental	48 hours	Effect Concentration 50%	0.0058 mg/l
Benzalkonium Chloride	68424-85-1	Sheepshead Minnow	Experimental	96 hours	Lethal Concentration 50%	0.86 mg/l
Benzalkonium Chloride	68424-85-1	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	0.064 mg/l
Benzalkonium Chloride	68424-85-1	Water flea	Experimental	21 days	No obs Effect Conc	0.00415 mg/l
Benzalkonium Chloride	68424-85-1	Diatom	Experimental	96 hours	No obs Effect Conc	0.035 mg/l
Benzalkonium Chloride	68424-85-1	Fathead Minnow	Experimental	28 days	No obs Effect Conc	0.0322 mg/l
Benzalkonium Chloride	68424-85-1	Green algae	Experimental	72 hours	No obs Effect Conc	0.009 mg/l

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Ethoxylate Alcohol	68131-39-5	Experimental Biodegradation	28 days	Carbon dioxide evolution	64 % weight	Other methods
Benzalkonium Chloride	68424-85-1	Experimental Biodegradation	28 days	Carbon dioxide evolution	95.5 % weight	OECD 301B - Mod. Sturm or CO2

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Benzalkonium Chloride	68424-85-1	Experimental BCF - Bluegill	60 days	Bioaccumulation Factor	33	Bioconcentration: Flow-through
Ethoxylate Alcohol	68131-39-5	Experimental BCF-Carp	72 hours	Bioaccumulation Factor	310	Other methods

12.4. Mobility in soil

Please contact manufacturer for more details

12.5 Other adverse effects

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. 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

Not hazardous for transportation.

UN No.: Not applicable

UN Proper Shipping Name: Not applicable

Transport hazard class (IMO): Not applicable

Transport hazard class (IATA): Not applicable

Packing Group: Not applicable

Environmental Hazards:

Not applicable

Special precautions for user

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.

SECTION 16: Other information

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

3M Thailand SDSs are available at <http://www.3M.com/TH>