



Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M(TM) PHENOLIC DISINFECTANT CLEANER CONCENTRATE (Product No. 18, Twist 'n Fill (tm) System)

MANUFACTURER: 3M
DIVISION: Building & Commercial Services Division

ADDRESS: 3M Center
St. Paul, MN 55144-1000

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

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Product Use:

Intended Use: Disinfectant

SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
WATER	7732-18-5	40 - 60
O-BENZYL-P-CHLOROPHENOL	120-32-1	9.5
O-PHENYLPHENOL	90-43-7	9.504
ETHYLENE GLYCOL	107-21-1	5 - 10
SODIUM HYDROXIDE	1310-73-2	0 - 5
SODIUM MONO-C10-16-ALKYL SULFATES	68585-47-7	0 - 5
ISOPROPYL ALCOHOL	67-63-0	1 - 5
DODECYLBENZENESULFONIC ACID	27176-87-0	1 - 5
EDTA TETRASODIUM SALT	64-02-8	1 - 5
UREA	57-13-6	1 - 5

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Odor, Color, Grade: Clear, light brown color with floral fragrance

General Physical Form: Liquid

Immediate health, physical, and environmental hazards: Contact with aluminum or zinc in a pressurized system may generate hydrogen gas which could create an explosion hazard. May cause chemical eye burns. May cause chemical skin burns. May cause

chemical gastrointestinal burns. May cause target organ effects. Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

3.2 POTENTIAL HEALTH EFFECTS

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.

Skin Contact:

Corrosive (Skin Burns): Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction. May be absorbed through skin and cause target organ effects.

Inhalation:

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

Prolonged or repeated exposure may cause:

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

May be absorbed following inhalation and cause target organ effects.

Ingestion:

Gastrointestinal Corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain; nausea; vomiting; and diarrhea; blood in the feces and/or vomitus may also be seen.

May be harmful or fatal if swallowed.

May be absorbed following ingestion and cause target organ effects.

Target Organ Effects:

Cardiac Effects: Signs/symptoms may include irregular heartbeat (arrhythmia), changes in heart rate, damage to heart muscle, heart attack, and may be fatal.

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

Prolonged or repeated exposure may cause:

Kidney/Bladder Effects: Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination.

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

Ethylene Glycol has been shown to cause birth defects in studies with lab animals. The defects resulted from high, oral doses to pregnant rats and mice. This is not an expected result from the recommended use of this product.

Contains a chemical or chemicals which can cause cancer.

O-Phenylphenol has been shown to cause cancer in studies with lab animals. The effect resulted from high oral doses. This is not an expected result from the recommended use of this product.

3.3 POTENTIAL ENVIRONMENTAL EFFECTS

A 3M Product Environmental Data Sheet (PED) is available.

A conservative assessment of this product indicates that its use and proper disposal are likely to present a low environmental risk.

Potential use and misuse are unlikely to cause components to enter the environment in quantities or by routes that could cause adverse environmental impacts.

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water for at least 15 minutes. Get immediate medical attention. Wash contaminated clothing and clean shoes before reuse.

Inhalation: Remove person to fresh air. If signs/symptoms develop, get medical attention.

If Swallowed: Do not induce vomiting. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

4.2 NOTE TO PHYSICIANS

Probable mucosal damage may contraindicate the use of gastric lavage.

Measures against circulatory shock, respiratory depression, and convulsion may be needed.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Flash Point *Not Applicable*

OSHA Flammability Classification: Not Applicable

5.2 EXTINGUISHING MEDIA

Material will not burn.

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Nonflammable.

Unusual Fire and Explosion Hazards: Not applicable. Contact with aluminum or zinc in a pressurized system may generate hydrogen gas which could create an explosion hazard.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill. Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. Contain spill. For larger spills, cover drains and build dikes to prevent entry

into sewer systems or bodies of water. Dilute in a large excess of water. Carefully, and with stirring, add appropriate dilute acid such as sulfamic acid or vinegar. Confirm neutrality. 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 toxic, corrosivity or flammability hazard. Collect as much of the spilled material as possible. Clean up residue with water. Clean up residue with detergent and water. Place in a metal container approved for use in transportation by appropriate authorities. The container must be lined with polyethylene plastic or contain a plastic drum liner made of polyethylene. Cover, but do not seal for 48 hours. Dispose of collected material as soon as possible.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Keep out of the reach of children. This product is not intended to be used without prior dilution as specified on the product label. Avoid breathing of vapors, mists or spray. Avoid skin contact. Avoid eye contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep away from aluminum and zinc. Avoid creasing or impacting container side walls.

7.2 STORAGE

Store away from areas where product may come into contact with food or pharmaceuticals. Keep container in well-ventilated area. Store away from acids.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Use in a well-ventilated area. NOTE: When used as directed and diluted and dispensed with a TWIST 'n FILL(TM) Chemical Dispenser, special ventilation is not required.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact. NOTE: When used as directed and diluted and dispensed with a TWIST 'n FILL(TM) Chemical Dispenser, eye contact with the concentrate is not expected to occur.

If the product is not used with the Twist 'n Fill system or if there is an accidental release, the following eye protection is recommended: Indirect Vented Goggles, Full Face Shield.

8.2.2 Skin Protection

Avoid skin contact. NOTE: When used as directed and diluted and dispensed with a TWIST 'n FILL(TM) Chemical Dispenser, skin contact with the concentrate is not expected to occur.

If the product is not used with the Twist 'n Fill system or if there is an accidental release, select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials. Gloves made from the following material is recommended: Butyl Rubber, Neoprene, Polyvinyl Chloride. The following protective clothing material(s) are recommended: Apron - Neoprene, Boots - Neoprene.

8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray. NOTE: When used as directed and diluted and dispensed with a TWIST 'n FILL(TM) Chemical Dispenser, respiratory protection is not required.

If the product is not used with the Twist 'n Fill system or if there is an accidental release, select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Fullface air-

purifying respirator with organic vapor cartridges. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	<u>Additional Information</u>
ETHYLENE GLYCOL	ACGIH	CEIL, as aerosol	100 mg/m3	Table A4
ETHYLENE GLYCOL	CMRG	CEIL, as vapor and aerosol	100 mg/m3	
ETHYLENE GLYCOL	OSHA	CEIL	50 ppm	Table Z-1A
ISOPROPYL ALCOHOL	ACGIH	TWA	200 ppm	Table A4
ISOPROPYL ALCOHOL	ACGIH	STEL	400 ppm	Table A4
ISOPROPYL ALCOHOL	OSHA	TWA	400 ppm	Table Z-1A
ISOPROPYL ALCOHOL	OSHA	STEL	500 ppm	Table Z-1A
SODIUM HYDROXIDE	ACGIH	CEIL	2 mg/m3	
SODIUM HYDROXIDE	CMRG	TWA	2 mg/m3	
SODIUM HYDROXIDE	OSHA	CEIL	2 mg/m3	Table Z-1A
SODIUM HYDROXIDE	OSHA	TWA	2 mg/m3	Table Z-1
UREA	AIHA	TWA	10 mg/m3	

SOURCE OF EXPOSURE LIMIT DATA:

- ACGIH: American Conference of Governmental Industrial Hygienists
- CMRG: Chemical Manufacturer Recommended Guideline
- OSHA: Occupational Safety and Health Administration
- AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Odor, Color, Grade:	Clear, light brown color with floral fragrance
General Physical Form:	Liquid
Flash Point	<i>Not Applicable</i>
Boiling point	> 200 °F
Vapor Pressure	Approximately 17.5 mmHg [<i>Details: CONDITIONS: @ 20 C</i>]
Specific Gravity	Approximately 1.1 [<i>Ref Std: WATER=1</i>]
pH	12 - 13
Solubility in Water	Complete
Evaporation rate	Approximately 1 [<i>Ref Std: WATER=1</i>]
Volatile Organic Compounds	10 - 30 % [<i>Test Method: calculated per CARB title 2</i>]
Percent volatile	65 - 100 %
VOC Less H2O & Exempt Solvents	100 - 500 g/l [<i>Test Method: calculated per CARB title 2</i>]
Viscosity	< 100 centipoise

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid: Strong acids

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition: Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

A 3M Product Environmental Data Sheet (PED) is available.

CHEMICAL FATE INFORMATION

A 3M Product Environmental Data Sheet (PED) is available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Incinerate in a permitted hazardous waste incinerator in the presence of a combustible material. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

EPA Hazardous Waste Number (RCRA): D002 (Corrosive)

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14: TRANSPORT INFORMATION

ID Number	UPC	ID Number	UPC
70-0708-4018-9	00-48011-20786-0	70-0708-4026-2	00-48011-23955-7
70-0710-0976-8	00-48011-23886-4	70-0710-0977-6	00-48011-23956-4

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

Contact 3M for more information.

311/312 Hazard Categories:

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

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
O-PHENYLPHENOL	90-43-7	9.504
ETHYLENE GLYCOL	107-21-1	5 - 10

STATE REGULATIONS

Contact 3M for more information.

CALIFORNIA PROPOSITION 65

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Classification</u>
O-PHENYLPHENOL	90-43-7	**Carcinogen

** WARNING: contains a chemical which can cause cancer.

CHEMICAL INVENTORIES

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

All the components of this product are listed on China's Inventory of Chemical Substances.

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

Contact 3M for more information.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

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

SECTION 16: OTHER INFORMATION

NFPA Hazard Classification

Health: 3 Flammability: 0 Reactivity: 0 Special Hazards: None
Acid/Base: Alkaline Corrosive: Yes

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: 3 Flammability: 0 Reactivity: 0 Protection: X - See PPE section.

Hazardous Material Identification System (HMIS®) 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® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint and Coatings Association (NPCA).

Revision Changes:

Section 1: Product use information was modified.
Section 1: Division name was modified.
Copyright was modified.
Section 7: Handling information was modified.
Section 7: Storage information was modified.
Section 8: Eye/face protection comment was added.
Section 8: Skin protection comment was added.
Section 8: Respiratory protection comment was added.
Section 14: ID Number(s) and/or UPC(s) Template 1 was added.
Section 2: Ingredient table was added.
Section 15: EPCRA 313 information was added.
Section 15: EPCRA 313 text was added.
Section 8: Exposure guidelines ingredient information was added.
Section 8: Exposure guidelines data source legend was added.
Section 15: California proposition 65 ingredient information was added.
Section 15: California proposition 65 heading was added.
Section 15: California proposition 65 cancer warning was added.
Section 8: Eye/face protection information was deleted.
Section 8: Skin protection - recommended gloves information was deleted.
Section 8: Eye/face protection text was deleted.
Section 8: Skin protection - recommended gloves text was deleted.
Section 8: Skin protection - protective clothing text was deleted.
Section 8: Eye/face protection information - punctuation - was deleted.
Section 8: Skin protection - recommended gloves - punctuation was deleted.

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