

# **Safety Data Sheet**

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# **SECTION 1: Identification**

### 1.1. Product identifier

3MTM ESPETM AVAGARDTM D INSTANT HAND ANTISEPTIC WITH MOISTURIZERS

**Product Identification Numbers** 70-2010-5604-4, 70-2010-5605-1, 70-2010-5606-9

### 1.2. Recommended use and restrictions on use

**Recommended use** Hand sanitizer.

1.3. Supplier's details	
<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	3M ESPE Dental Products
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**

This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure.

### 2.1. Hazard classification

Flammable Liquid: Category 2. Serious Eye Damage/Irritation: Category 2B. Specific Target Organ Toxicity (central nervous system): Category 3.

2.2. Label elements Signal word Danger

Symbols Flame | Exclamation mark |

**Pictograms** 



Hazard Statements Highly flammable liquid and vapor.

Causes eye irritation. May cause drowsiness or dizziness.

### **Precautionary Statements**

**General:** Keep out of reach of children.

### **Prevention:**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only in a well-ventilated area. Wear protective gloves and eye/face protection.

### **Response:**

IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Call a POISON CENTER or doctor/physician if you feel unwell. In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

### Storage:

Store in a well-ventilated place. Keep cool. Keep container tightly closed.

### **Disposal:**

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

### 2.3. Hazards not otherwise classified

Although ethyl alcohol is classified as a central nervous system depressant, exposures associated with this health effect are not expected during normal, intended use of this product.

# **SECTION 3: Composition/information on ingredients**

Ingredient	C.A.S. No.	% by Wt
ETHYL ALCOHOL	64-17-5	50 - 70 Trade Secret *
WATER	7732-18-5	25 - 35 Trade Secret *
POLYETHLENE GLYCOL	25322-68-3	< 3 Trade Secret *
SQUALANE	111-01-3	< 2 Trade Secret *
ALCOHOLS	26636-40-8	< 2 Trade Secret *
DOCOSYL ALCOHOL	661-19-8	< 2 Trade Secret *
FATTY ACIDS	103213-20-3	< 2 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 you feel unwell, 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

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

### 5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

### Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

### **5.3. Special protective actions for fire-fighters**

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

# **SECTION 6: Accidental release measures**

## 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. 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.

### 6.3. Methods and material for containment and cleaning up

Contain spill. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with detergent and 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. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Do not get in eyes.

### 7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from heat. Store away from acids. Store away from oxidizing agents.

# **SECTION 8: Exposure controls/personal protection**

### **8.1.** Control parameters

### **Occupational exposure limits**

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	<b>Additional Comments</b>
POLYETHLENE GLYCOL	25322-68-3	AIHA	TWA(as particulate):10	
			mg/m3	
ETHYL ALCOHOL	64-17-5	ACGIH	STEL:1000 ppm	A3: Confirmed animal
				carcin.
ETHYL ALCOHOL	64-17-5	OSHA	TWA:1900 mg/m3(1000 ppm)	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

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 in a well-ventilated area.

### 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

See Section 7.1 for additional information on skin protection.

### **Respiratory protection**

None required.

# **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

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General Physical Form:	Liquid
Odor, Color, Grade:	White viscous liquid with slight alcohol odor.
Odor threshold	No Data Available
рН	6
Melting point	Not Applicable
Boiling Point	>=172 °F
Flash Point	70 °F
Evaporation rate	1.4 [ <i>Ref Std:</i> BUOAC=1]
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	3.3 % volume
Flammable Limits(UEL)	19 % volume
Vapor Density	1.6 [ <i>Ref Std:</i> AIR=1]
Density	0.83 g/ml
Specific Gravity	0.83 [ <i>Ref Std:</i> WATER=1]
Solubility in Water	Moderate
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	50,000 - 250,000 centipoise
Volatile Organic Compounds	496 g/l
Percent volatile	90 % weight
VOC Less H2O & Exempt Solvents	630 g/l
-	

# **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

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

# 10.2. Chemical stability

Stable.

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

### **10.4. Conditions to avoid** Heat Sparks and/or flames

# **10.5.** Incompatible materials

Strong oxidizing agents

### **10.6.** Hazardous decomposition products

Substance None known. **Condition** 

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.

This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure.

**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:**

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

## **Eye Contact:**

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

### **Ingestion:**

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

May cause additional health effects (see below).

### **Additional Health Effects:**

### Single exposure may cause target organ effects:

Exposures needed to cause the following health effect(s) are not expected during normal, intended use:

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness,

incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

### **Additional Information:**

This product contains ethanol. Alcoholic beverages and ethanol in alcoholic beverages have been classified by the International Agency for Research on Cancer as carcinogenic to humans. There are also data associating human consumption of alcoholic beverages with developmental toxicity and liver toxicity. Exposure to ethanol during the foreseeable use of this product is not expected to cause cancer, developmental toxicity, or liver toxicity.

### **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

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Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
ETHYL ALCOHOL	Dermal	Rabbit	LD50 > 15,800 mg/kg
ETHYL ALCOHOL	Inhalation-	Rat	LC50 124.7 mg/l
	Vapor (4		
	hours)		
ETHYL ALCOHOL	Ingestion	Rat	LD50 17,800 mg/kg
ALCOHOLS	Dermal	Professio	LD50 Not applicable
		nal	
		judgeme	
		nt	
ALCOHOLS	Ingestion	similar	LD50 Not applicable
		compoun	
		ds	
POLYETHLENE GLYCOL	Dermal	Rabbit	LD50 > 20,000 mg/kg
POLYETHLENE GLYCOL	Ingestion	Rat	LD50 32,770 mg/kg
DOCOSYL ALCOHOL	Dermal	Professio	LD50 Not applicable
		nal	
		judgeme	
		nt	
DOCOSYL ALCOHOL	Ingestion	Rat	LD50 > 2,000 mg/kg
SQUALANE	Dermal	Professio	LD50 Not applicable
		nal	
		judgeme	
		nt	
FATTY ACIDS	Ingestion	Rat	LD50 > 5,000 mg/kg
SQUALANE	Ingestion	Rat	LD50 > 2,000  mg/kg

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

Name	Species	Value
ETHYL ALCOHOL	Rabbit	No significant irritation
POLYETHLENE GLYCOL	Rabbit	Minimal irritation
FATTY ACIDS	Rabbit	No significant irritation

### **Serious Eye Damage/Irritation**

Name	Species	Value
ETHYL ALCOHOL	Rabbit	Moderate irritant
POLYETHLENE GLYCOL	Rabbit	Mild irritant
FATTY ACIDS	Rabbit	No significant irritation

## **Skin Sensitization**

Name	Species	Value
ETHYL ALCOHOL	Human	Some positive data exist, but the data are not sufficient for classification
POLYETHLENE GLYCOL	Guinea pig	Not sensitizing

### **Respiratory Sensitization**

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

### Germ Cell Mutagenicity

Name	Route	Value
ETHYL ALCOHOL	In Vitro	Some positive data exist, but the data are not sufficient for classification
ETHYL ALCOHOL	In vivo	Some positive data exist, but the data are not sufficient for classification
POLYETHLENE GLYCOL	In Vitro	Not mutagenic
POLYETHLENE GLYCOL	In vivo	Not mutagenic

### Carcinogenicity

Name Route Species Value
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ETHYL ALCOHOL	Ingestion	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
POLYETHLENE GLYCOL	Ingestion	Rat	Not carcinogenic

## **Reproductive Toxicity**

# **Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
ETHYL ALCOHOL	Inhalation	Not toxic to development	Rat	NOAEL 38 mg/l	during gestation
ETHYL ALCOHOL	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 5,200 mg/kg/day	premating & during gestation
POLYETHLENE GLYCOL	Ingestion	Not toxic to female reproduction	Rat	NOAEL 1,125 mg/kg/day	during gestation
POLYETHLENE GLYCOL	Ingestion	Not toxic to male reproduction	Rat	NOAEL 5699 +/- 1341 mg/kg/day	5 days
POLYETHLENE GLYCOL	Not Specified	Some positive reproductive/developmental data exist, but the data are not sufficient for classification		NOEL N/A	
POLYETHLENE GLYCOL	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Mouse	NOAEL 562 mg/animal/da y	during gestation

## Target Organ(s)

# Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
ETHYL ALCOHOL	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	LOAEL 2.6 mg/l	30 minutes
ETHYL ALCOHOL	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	LOAEL 9.4 mg/l	not available
ETHYL ALCOHOL	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL not available	
ETHYL ALCOHOL	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 3,000 mg/kg	
POLYETHLENE GLYCOL	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.008 mg/l	2 weeks

# Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
ETHYL ALCOHOL	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rabbit	LOAEL 124 mg/l	365 days
ETHYL ALCOHOL	Inhalation	hematopoietic system   immune system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 25 mg/l	14 days
ETHYL ALCOHOL	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 8,000 mg/kg/day	4 months
ETHYL ALCOHOL	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 3,000 mg/kg/day	7 days
POLYETHLENE GLYCOL	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for	Rat	NOAEL 1.008 mg/l	2 weeks

			classification			
POLYETHLENE	Ingestion	kidney and/or	Some positive data exist, but the	Rat	NOAEL	13 weeks
GLYCOL		bladder	data are not sufficient for		5,640	
			classification		mg/kg/day	
POLYETHLENE GLYCOL	Ingestion	heart   endocrine system   hematopoietic system   liver   nervous system	All data are negative	Rat	NOAEL 5,640 mg/kg/day	13 weeks

### 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**

### **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.

Incinerate in a permitted waste incineration facility.

## EPA Hazardous Waste Number (RCRA): D001 (Ignitable)

# **SECTION 14: Transport Information**

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

# **SECTION 15: Regulatory information**

## **15.1. US Federal Regulations**

Contact 3M for more information.

### **311/312 Hazard Categories:**

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

### **15.2. State Regulations**

Contact 3M for more information.

## **15.3.** Chemical Inventories

Contact 3M for more information.

## **15.4. International Regulations**

Contact 3M for more information.

## 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: 1 Flammability: 3 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.

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