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ORIGINAL MSDS



GLOSSARY

ACTIO MSDS ID: 922350

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SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER NAME: 3M
DIVISION: 3M ESPE Dental Products
ADDRESS: 3M Center St. Paul, MN 55144-1000
EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)
ISSUED: 12/21/2007
SUPERSEDES: Initial Issue
Intended Use: Hand sanitizer.
ADDRESS: 3M Center
ADDRESS CITY: St. Paul,
ADDRESS STATE: MN
ADDRESS ZIP: 55144-1000
BUSINESS PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)
TRADE NAME: 3M(TM) ESPE(TM) AVAGARD(TM) D INSTANT HAND ANTISEPTIC WITH MOISTURIZERS
PRODUCT NAME: 3M ESPE AVAGARD D INSTANT HAND ANTISEPTIC WITH MOISTURIZERS
MSDS Manufacturer Number: 24-1610-5

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient Name	CAS#	Ingredient Percent
ETHYL ALCOHOL	64-17-5	50 - 70 by Weight
WATER	7732-18-5	25 - 35 by Weight
POLYETHYLENE GLYCOL	25322-68-3	< 3 by Weight
FATTY ACIDS	103213-20-3	< 2 by Weight
SQUALANE	111-01-3	< 2 by Weight
ALCOHOLS	26636-40-8	< 2 by Weight
DOCOSYL ALCOHOL	661-19-8	< 2 by Weight

SECTION 3 - HAZARDS IDENTIFICATION

Odor, Color, Grade: White viscous liquid with slight alcohol odor.
General Physical Form: Liquid
Immediate health, physical, and environmental hazards: Flammable liquid and vapor. Vapors may travel long distances along the ground or floor to an ignition source and flash back. Closed containers exposed to heat from fire may build pressure and explode. May cause target organ effects. Contains a chemical or chemicals which can cause birth defects or other reproductive harm.
EYE CONTACT: Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.
SKIN CONTACT: No health effects are expected.
INHALATION: Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May be absorbed following inhalation and cause target organ

	effects.
INGESTION:	Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. May be absorbed following ingestion and cause target organ effects.
Target Organ Effects:	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: Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice. Contains a chemical or chemicals which can cause birth defects or other reproductive harm. NOTE: This product contains ethanol. There are data associating human consumption of alcoholic beverages (ethanol) with developmental toxicity. This is not an expected effect during the foreseeable use of this product.
Carcinogenicity:	Contains a chemical or chemicals which can cause cancer. NOTE: This product contains ethanol. In IARC published Monograph No. 44, entitled, "Alcohol Drinking", the carcinogenicity of ethanol was determined based on chronic exposure to ethanol through human consumption of alcoholic beverages. This is not an expected effect during the foreseeable use of this product.
Carcinogenicity of Ingredients:	ETHYL ALCOHOL: (CAS: 64-17-5; Class Description: Group 1; Regulation: International Agency for Research on Cancer;)

SECTION 4 - FIRST AID MEASURES

EYE CONTACT:	Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.
SKIN CONTACT:	No need for first aid is anticipated.
INHALATION:	Remove person to fresh air. If signs/symptoms develop, get medical attention.
INGESTION:	Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.
First Aid Comments:	The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

SECTION 5 - FIRE FIGHTING MEASURES

AUTOIGNITION TEMPERATURE:	No Data Available
FLASH POINT:	70 deg F
FLAMMABLE LIMITS - LEL:	3.3 % volume
FLAMMABLE LIMITS - UEL:	19 % volume
EXTINGUISHING MEDIA:	Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).
SPECIAL FIRE FIGHTING PROCEDURES:	Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA). Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	Flammable liquid and vapor. Vapors may travel long distances along the ground or floor to an ignition source and flash back. Closed containers exposed to heat from fire may build pressure and explode.
Note:	See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.
OSHA Flammability Classification:	Class IB Flammable Liquid

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. Remove all ignition sources such as flames,
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smoking materials, and electrical spark sources. Use only non-sparking tools. Ventilate the area with fresh air. Contain spill. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam is recommended. 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 using non-sparking tools. Clean up residue with detergent and water. Collect the resulting residue containing solution. Place in a metal container approved for transportation by appropriate authorities. Seal the container. 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

HANDLING:	Avoid eye contact. A no-touch technique is recommended. If skin contact occurs, wash skin with soap and water. Acrylates may penetrate commonly-used gloves. If product contacts glove, remove and discard glove, wash hands immediately with soap and water and then re-glove. Do not ingest. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. No smoking while handling this material. Keep out of the reach of children.
STORAGE:	Store away from heat. Store away from oxidizing agents. Keep container tightly closed.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

Guideline Type:	ACGIH TWA
Guideline Info:	1000 ppm Table A4
Ingredient:	ETHYL ALCOHOL
Guideline Type:	OSHA TWA
Guideline Info:	1000 ppm Table Z-1
Ingredient:	POLYETHYLENE GLYCOLS
Guideline Type:	AIHA TWA, as aerosol
Guideline Info:	10 mg/m ³
Ingredient:	ETHYL ALCOHOL
ENGINEERING CONTROLS:	Use in a well-ventilated area.
EYE PROTECTION:	Avoid eye contact.
SKIN PROTECTION:	Not applicable.
RESPIRATORY PROTECTION:	Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.
Prevention of Swallowing:	Do not ingest.
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:	White viscous liquid with slight alcohol odor.
General Physical Form:	Liquid
Autoignition temperature:	No Data Available
Flash Point:	70 deg F
Flammable Limits - LEL:	3.3 % volume
Flammable Limits - UEL:	19 % volume
BOILING POINT:	>=172 deg F
DENSITY:	0.83 g/ml
VAPOR DENSITY:	1.6 [Ref Std: AIR=1]

SPECIFIC GRAVITY: 0.83 [Ref Std: WATER=1]
pH: 6
MELTING POINT: Not Applicable
EVAPORATION RATE: 1.4 [Ref Std: BUOAC=1]
VOLATILE ORGANIC COMPOUNDS: 496 g/l
PERCENT VOLATILE: 90 % weight
VISCOSITY: 50000 - 250000 centipoise
VOC LESS H2O & EXEMPT SOLVENTS: 630 g/l
SOLUBILITY IN WATER: Moderate

SECTION 10 - STABILITY and REACTIVITY

STABILITY: Stable.
CONDITIONS TO AVOID: Heat; Sparks and/or flames; Strong oxidizing agents
HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS: Substance: Carbon monoxide (Condition: During Combustion)
Substance: Carbon dioxide (Condition: During Combustion)

SECTION 11 - TOXICOLOGICAL INFORMATION

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: Not determined.
CHEMICAL FATE INFORMATION: Not determined.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility. Since regulations vary, consult applicable regulations or authorities before disposal.
EPA Hazardous Waste Number (RCRA): EPA Hazardous Waste Number (RCRA): D001 (Ignitable)

SECTION 14 - TRANSPORT INFORMATION

Transportation Information: ID Number(s): 70-2010-5604-4, 70-2010-5605-1, 70-2010-5606-9
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 - Yes Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes
STATE REGULATIONS: Contact 3M for more information.
CHEMICAL INVENTORIES: This material contains one or more substances not listed on the TSCA Inventory. Commercial use of this material is regulated by the FDA. Contact 3M for more information.
INTERNATIONAL REGULATIONS: Contact 3M for more information.
U.S OSHA: This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16 - ADDITIONAL INFORMATION

NFPA - HEALTH: 1
NFPA - FIRE: 3
HMIS AND NFPA NOTES: NFPA Explanation: 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. No revision information is available. ;

NFPA - REACTIVITY: 0
NFPA - SPECIAL HAZARDS: None
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