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MATERIAL SAFETY DATA SHEET

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1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION

Tradename:

ESPE SIL

3M Product ID:

70-2011-0831-6

2 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient name and classification CAS number Percentage 64-17-5 Approximately 99 ETHYL ALCOHOL

Regulatory Lists: IARC(Group 1)

EU Hazard Symbols and Risk Phrases: EU - Adaptation 21 (F;

EINECS No: 2005786

METHACRYLOXYPROPYLTRIMETHOXYSILANE 2530-85-0 Approximately 1.0

3 HAZARDS IDENTIFICATION

Critical hazards:

Highly flammable.

4 FIRST-AID MEASURES

Eye Contact:

Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact:

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

Inhalation:

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

Ingestion:

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

5 FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

Exposure Hazards:

Closed containers exposed to heat from fire may build pressure and explode. Vapours may travel long distances along the ground or floor to an ignition source and flash back.

Hazardous Decomposition:

Carbon monoxide - During Combustion. Carbon dioxide - during combustion. Irritant Vapours or Gases - During Combustion.

Fire-Fighting Procedures:

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective equipment and a self-contained breathing apparatus.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Refer to other sections of this Material Safety Data Sheet for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

Methods for Cleaning up:

Seal the container. Ventilate the area with fresh air. Contain spill. Cover with absorbent material. 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. Collect the resulting residue containing solution. Dispose of collected material as soon as possible.

7 HANDLING AND STORAGE

Incompatible Materials/Conditions:

Store away from heat. Store out of direct sunlight. Store away from oxidising agents.

Ventilation:

Keep container in a well-ventilated area.

Explosion Prevention:

Flammable liquid and vapour. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition.

Precautions for Safe Handling:

Keep container tightly closed. Avoid contact with oxidising agents.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection:

Avoid eye contact. The following should be worn alone or in combination, as appropriate to prevent eye contact: Safety glasses with side shields.

Skin Protection:

Gloves not normally required. Avoid prolonged or repeated skin contact.

Respiratory Protection:

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

Ingestion:

Do not ingest.

Recommended Ventilation:

Use in a well-ventilated area.

Exposure Limits:

ETHYL ALCOHOL (64-17-5)

HSE WEL TWA: 1000 ppm; 1920 mg/m3 OES

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odour: Colourless liquid with alcohol

like odour.

pH: Not applicable

Boiling point/boiling range: 77.78 C @ 1 ATM

Melting point/melting range: Not applicable

Flash point: 12.22 C Closed Cup

Autoflammability: Not determined

Vapour pressure: 45 mmHg @ 20 C

Water Solubility: 23 C

Specific gravity: 0.79 -0.85

Vapour density: 1

Volatile organic compounds: 90 %

Evaporation rate: 1

Viscosity: 1.1 centipoise @ 23 C

Percent Volatile: 95 %

10 STABILITY AND REACTIVITY

Conditions to Avoid:

Heat. Sparks and/or Flames.

Materials to Avoid:

Strong oxidising agents.

Hazardous Decomposition:

Hazardous polymerisation will not occur. Stable.

11 TOXICOLOGICAL INFORMATION

Effects from Eye Contact:

Mild Eye Irritation: Signs/symptoms may include redness, pain, and tearing.

Effects from Skin Contact:

Mild Skin Irritation: signs/symptoms may include localised redness, swelling, and itching.

Effects from Inhalation:

May be absorbed following inhalation and cause target organ effects. Upper Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Effects from Ingestion:

May be absorbed following ingestion and cause target organ effects. Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, nausea, diarrhoea and vomiting.

Carcinogenicity:

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.

Other Effects and Information:

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

12 ECOLOGICAL INFORMATION

Ecotoxicity Data:

Not determined.

Ecofate Data:

Not determined.

Special statements for 2001/58/EC:

A conservative assessment indicates this product presents a low environmental risk because use and disposal are unlikely to result in the significant release of components to the environment.

13 DISPOSAL CONSIDERATIONS Product as Sold: Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility. Special Instructions: Since regulations vary, consult applicable regulations or authorities before disposal. ______ 14 TRANSPORT INFORMATION -----UN NUMBER: UN1770 UN number: UK ROAD/SEA FREIGHT (IMO) CLASSIFICATION: Substance Identification Number: UN1770 Class: 3.0 Packing Group: ΙI Proper Shipping Name: Ethanol solution ADR/RID CLASSIFICATION: Class: 3.0 ADR classification: F1 ICAO/IATA CLASSIFICATION: 3.0 Class: Sub-Risk: Not applicable. Packing Group: ΙI Proper Shipping Name: Dangerous Goods in excepted quantities of Class 3, UN1170. 15 REGULATORY INFORMATION Disclosable Ingredients: No ingredients required on label. Symbol(s): (F) Flame (Highly Flammable). Risk Phrases: (R11) Highly Flammable. Safety Phrases: Keep away from heat. Keep away from sources of ignition - No Smoking. Use only in well ventilated areas.

16 OTHER INFORMATION

Regulatory Information:

The following UK Regulations as amended may affect the product as supplied: The Chemicals (Hazard Information and Packaging for supply) Regulations, as amended. The Carriage of Dangerous Goods (Classification, Packaging and Labelling) and use of Transportable Pressure Receptacles Regulations 1996, as amended. Carriage of Dangerous Goods by Road regulations, 1996, as amended. The Control of Substances Hazardous to Health Regulations 1999 as amended. The Special Waste Regulations 1996, as amended. The Environmental Protection Act, 1990 The Health and Safety at Work Act, 1974.

Reissue date/Reason for reissue.
Updated section 14.

Intended Use of Product:
 Dental restorative repair

Limitations on Use of Product:

For use only by dental professionals

The information on this 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.