

EMS CATALOG NO: 15320  
EMS PRODUCT: Eukitt Mounting Medium  
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**MATERIAL SAFETY DATA SHEET**

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**FOR PRODUCT AND SALES INFORMATION**

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**PRODUCT IDENTIFICATION**

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PRODUCT NAME: EUKITT (R) Mounting Medium

CAS NUMBER: 1330-20-7

CHEMICAL NAME: Xylene (commercial grade mixed isomers)

PERCENT BY VOLUME: 55%

DESCRIPTION(Uses): Mounting medium used in microscopy; adhesive and specimen preservative used in manual and automated coverslipping microscopic techniques. Adhesive for hermetically sealing non-plastic containers and container tops. Special purpose adhesive and sealant for use with glass, non-plastic and other non-reactive materials.

CAUTIONS: Xylene component of Eukitt is an eye, skin and mucous membrane irritant and may be narcotic in high concentrations. It is a dangerous fire hazard.

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**INGREDIENTS & EXPOSURE LIMITS**

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ACRYLIC RESIN SOLUTION: 45% by volume. Manufacturer's proprietary formula

XYLENE SOLVENT: 55% by volume. User should assume  
CAS # 1330-20-7 commercial grade Xylene

MIXED ISOMERS which generally contain Isomer mixture of:  
(20%) o-xylene (ortho) (20% p-xylene (para)  
(40%) m-xylene (meta) (20%) ethylbenzene & small  
quantities of toluene

1991 OSHA PELs	1992-93 ACGIH TLVs
8-hr TWA:100ppm(435 mg/m3)	TWA:100ppm(434 mg/m3)
15-min STEL:150ppm(655mg/m3)	STEL150ppm(651 mg/m3)

1985-86 Toxicity Data\*\*

Human, inhalation, TClO:200ppm produced olfactory respiratory effects  
Man, inhalation LCLoL1000ppm/6hr;effects not reviewed  
Human, oral,LDLo50mg/kg:No toxic effect noted

1990 IDLH Level *	1990 NIOSH RELs
1000ppm	TWA:100ppm(435 mg/m3)
	STEL:150ppm(655 mg/m3)

\*Immediate dangerous to life and health

\*\*See Niosh, TRECS(XE2100000), for additional toxicity data

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PHYSICAL DATA

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BOILING POINT: 279oF to 284oF (137oC to 143oC)  
MELTING POINT: -13oF (-25oC)  
EVAPORATION RATE: N/A  
SPECIFIC GRAVITY(H2O=1): N/A  
APPEARANCE/ODOR: A clear liquid; aromatic hydrocarbon odor.  
WATER SOLUBILITY (%): Insoluble  
% VOLATILE BY VOLUME: 55%  
VAPOR PRESSURE: (8mbar) at 68oF(20oC)  
VAPOR DENSITY: (0.95 g/cm3 out 20oC)  
ODOR THRESHOLD: 1ppm

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FIRE AND EXPLOSION DATA

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		Lower	Upper
FLASH POINT and Method (Eukitt):	25oC/DIN51794	1%	7%
FLAMMABILITY LIMITS IN AIR:	1.2-7.0% by Volume		

EXTINGUISHING MEDIA:

Use foam, dry chemical or carbon dioxide. Use water spray to reduce rate of burning and to cool containers if large quantities of Eukitt are involved in fire conditions.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Xylene vapor is heavier than air and may travel a considerable

distance to a low-lying source of ignition and flashback. Keep away from open flame.

**FIRE FIGHTING PROCEDURES/SPECIAL:**

Wear self-container breathing apparatus (SCBA) with full Face-piece operated in the pressure demand or positive- pressure mode.

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**REACTIVITY DATA**

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**STABILITY:** Stable in closed containers during normal storage and handling operations. Eukitt does not undergo hazardous polymerization.

**CHEMICAL INCOMPATIBILITY:**

Xylene component may react dangerously with strong oxidizers. Avoid contact with plastic materials or compounds; some rubbers and coated materials.

**CONDITIONS TO AVOID:** Avoid open flame, any exposure to sources of ignition and to strong oxidizers.

**HAZARDOUS DECOMPOSITION PRODUCTS:**

Carbon Monoxide (CO<sub>2</sub>) and other hydrocarbon by-products may evolve during fire.

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**HEALTH HAZARD INFORMATION**

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Eukitt and Xylene not listed as carcinogens by the IARC, NTP or OSHA.

**SUMMARY of RISKS:**

Xylene and Eukitt may act as a skin irritant. Excessive, direct prolonged contact should be avoided. Inhaling can depress central nervous system(CNS). Ingesting can result in gastro-intestinal disturbance and possibly vomiting. Extreme, prolonged inhalation could result in other adverse health effects. Existing medical conditions or problems with eyes, skin, central nervous system, kidneys and liver may be worsened by exposure to Xylene component.

**PRIMARY ENTRY:** Inhalation, excessive skin contact/absorption.

**ACUTE EFFECTS:** Dizziness; drowsiness; incoordination; irritation of eyes, nose and throat; nausea; vomiting; abdominal pain; and dermatitis.

**CHRONIC EFFECTS:** Visual dysfunction or injury; headache, loss of

appetite, nervousness, pale skin and skin rash.

**PRECAUTIONS:** Use in well-ventilated area or under fume hood.

**FIRST AID:**

**EYES:** Immediately flush eyes (including under eyelids) gently but thoroughly with running water for at least 15 minutes.

**SKIN:** Immediately wash affected area with soap and water.

**INHALATION:** Remove the exposed person to fresh air; restore and/or support his or her breathing as needed. Have trained People administer oxygen.

**INGESTION:**

Never give anything by mouth to someone who is unconscious or convulsing. Vomiting may occur spontaneously, but do not induce it. If vomiting should occur, keep exposed person's head below his or her hips to prevent aspiration (breathing the liquid Xylene into the lungs). Severe hemorrhagic pneumonitis with grave, possible fatal, pulmonary injury can occur from aspirating very small quantities of Xylene component. Get medical help (in plant paramedics, community) for all exposures. Seek prompt medical assistance for further treatment, observation and support after first aid.

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#### SPILL, LEAK AND DISPOSAL PROCEDURES

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**SPILL/LEAK:**

Notify safety personnel. Provide ventilation. Eliminate all sources of ignition immediately. Protect against contact with and inhalation of Xylene vapor. Contain spills. Collect waste or absorb it with an inert material such as sand, earth, vermiculite or other solvent absorbent material. Use tools or place waste liquid or absorbent into closable containers for disposal. Keep Eukitt and Xylene out of sewers, watersheds and waterways.

**WASTE DISPOSAL:**

Legal incineration. Dispose of waste amounts of Eukitt by following Federal, State or Local regulations pertaining to proper disposal of commercial grade Xylene (CAS NO. 1330-20-7).  
SEE FOLLOWING REGULATIONS:

EPA Designations: (40 CFR 302.4)

OSHA Designations: Air Contaminant (26 CFR 1910 100 Subpart Z)

RCRA Hazardous Waste: No. U239

CERCLA Hazardous Substance; reportable quantity; 1000 lbs (454 kg)

Clean Water Act (CWA):Section 311 (b) (9).

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SPECIAL PROTECTION INFORMATION

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PROTECTIVE EYEGLASSES may be worn. If splashing is possible when pouring Eukitt or Xylene from container, wear a full face shield as a supplementary protective measure. Follow OSHA eye and face protection regulations (29 CFR 1910.133). Wear IMPERVIOUS GLOVES. Use in well-ventilated area or under fume hood. Make EYEWASH STATIONS AND SAFETY WASHING FACILITIES available in areas of use and handling. CONTACT LENSES pose a special hazard; soft lenses may absorb irritants. All lenses concentrate vapors. DO NOT WEAR lenses in work area. Remove contaminated clothing and launder before wearing again. Clean from shoes and equipment.

COMMENT:

Practice good personal hygiene. Always wash hands thoroughly after using Eukitt. Keep Eukitt and Xylene off of clothing and equipment. Avoid transferring it from your hands to your mouth while eating, drinking or smoking. Do not eat, drink or smoke in your work area. Do not inhale Xylene vapor contained in Eukitt mounting medium.

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SPECIAL PRECAUTIONS AND COMMENTS

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STORAGE:

Store Eukitt in a cool, dry and well-ventilated area away from possible sources of ignition. Protect containers from physical damage while storing or handling. Store as close to 20°C as possible.

TRANSPORTATION DATA:      See 49 CFR 172.101-2

DOT ID:                              No. UN 1866

DOT SHIPPING NAME:              Resin Solution

DOT HAZARD CLASS:                Flammable liquid

DOT LABEL:                         Flammable Liquid

IMO LABEL:                         Flammable Liquid

IMO CLASS:                         3.2 or 3.3