

Material Safety Data Sheet
Flexsil Cup, Investment
AMETEK
Specialty Chemical Products Division

Prepared 2/06
Revision 2

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Section 1 --- Chemical Product and Company Identification

Trade Name: Flexsil Cup Investment

Manufacturer: AMETEK Chemical Products Division
42 Mountain Avenue
Nesquehoning, PA 18240
Emergency Telephone No.: Chemtrec (800) 424-9300

Section 2 --- Composition/Information on Ingredients

<u>Ingredients</u>	<u>CAS NO.</u>	<u>% Comp.</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Amorphous Silica	7631-86-9	92-98	20 ppm*	None
Phenol-Formaldehyde	9003-35-4	15-20**	None	None
Phenol (free)	108-95-2	Unknown	5 ppm	5 ppm
Formaldehyde (free)	50-00-0	Unknown	0.75 ppm***	None

* OSHA PEL Table Z-3: Millions of particles per cubic foot of air.

** % of actual coating as a % of the base material.

*** See 29 CFR 1910.1048.

Section 3 --- Hazard Information

Appearance and Odor: Mesh fabric coated with resin and having a slight phenolic odor, brown in color.

HMIS Rating: No hazard rating is available for this product.

Primary Entry Routes: Skin contact, inhalation, ingestion and eye contact

Effects of Overexposure:

Inhalation: Inhalation of airborne fibers may cause irritation to the mouth, nose and throat.

Eye: Slight irritation may be caused in contact with the eyes.

Skin: May be irritating to the skin and repeated contact may cause dermatitis in sensitive individuals.

Ingestion: May cause temporary irritation of the digestive tract, but not an expected route of entry in industrial uses.

Phenol (free) is highly toxic by ingestion.

Carcinogenicity:

OSHA carcinogens: Formaldehyde gas

IARC Class 1 (carcinogenic to humans): Formaldehyde gas

IARC Class 3 (possibly carcinogenic to humans): Phenol and amorphous silica

NTP 2 (reasonably anticipated to be a carcinogen): Formaldehyde gas

Section 4 --- First Aid Measures

Inhalation: Move the person to fresh air and support breathing as required. If symptoms (wheezing, coughing, shortness of breath, or burning in the mouth, throat, or chest) develop, call a physician and be prepared to transport the victim to a hospital for treatment.

Eye Contact: First check the victim for contact lenses and remove if present. Lift eyelids and flush immediately with flooding amounts of water for at least 15 minutes. Do not allow the victim to rub his/her eyes or keep them shut. Consult a physician or ophthalmologist if all material cannot be removed or if there is continuing irritation.

Skin Contact: Remove clothing around affected area. Rinse away loose material and wash affected area with soap and water. If there is a severe skin reaction or reddened or blistered skin, consult a physician and be prepared to transport the victim to a hospital for treatment.

Ingestion: Never give anything by mouth to an unconscious or convulsing person. Contact a poison control center with information from this MSDS and the Technical Data Sheet on the composition of the material ingested. Unless the poison control center advises otherwise, give the person one or two glasses of water, then induce vomiting. After first aid have the person see a physician for follow up care.

Section 5 --- Fire Fighting Measures

Flash Point: None reported

Autoignition Temperature: None reported

Lower Explosive Limit: None reported

Upper Explosive Limit: None reported

Extinguishing Media: Carbon dioxide, water, foam, or dry chemical as suitable for type of surrounding fire.

Unusual Fire or Explosion Hazards: During a fire, free phenol and free formaldehyde may be released as well as their combustion products, carbon monoxide and/or carbon dioxide among other unidentified organic compounds.

Fire Fighting: Wear a self-contained breathing apparatus (SCBA) with full facepiece operated in the pressure demand or positive pressure mode. Do not allow runoff from fire fighting to enter roadways or sewers. Material may dry out and present additional fire/explosion hazards.

Section 6 --- Accidental Release Measures

Dust or loose fibers can be vacuumed or swept with the aid of a dust suppressant. Dispose according to federal, state, and local environmental regulations.

Section 7 --- Handling and Storage

Store materials in a dry place, and keep container closed. Particular care should be taken when working with “used” material to minimize dust. If exposure limits are exceeded or if irritation is experienced, NIOSH approved respiratory protection should be worn.

Section 8 --- Exposure Controls and Personal Protection

Engineering Control and Ventilation:

Provide local exhaust when possible, and general ventilation as necessary, to keep airborne concentrations below exposure limits and as low as possible. When material is used at elevated temperatures, adequate ventilation must be provided.

Respiratory Protection: Use an NIOSH approved respirator when levels of fibers exceed the OSHA PEL.

Eye Protection: Safety glasses with side shields or chemical splash goggles must be worn to prevent eye contact. A good safety practice is to have an eyewash station readily available near the work area.

Skin Protection: Use protective gloves when handling this product. Apron and/or coveralls is also recommended.

Section 9 --- Physical and Chemical Properties

Physical State: Brown mesh fabric coated with phenolic resin
Appearance/Odor: Slight phenolic resin odor
Solubility: Insoluble
Specific Gravity (H₂O=1): 2.2

Section 10 --- Stability and Reactivity

Stability: Product is stable at normal temperature and storage conditions.
Chemical Incompatibilities: Basic phosphates, hydrofluoric acid, and some oxides and hydroxides.
Conditions to Avoid: Contamination from other materials.
Hazardous Polymerization: Hazardous polymerization will not occur under normal conditions.
Hazardous Decomposition Products: Thermal decomposition of phenolic coating may produce carbon monoxide and/or carbon dioxide, as well as other unidentified organic compounds.

Section 11 --- Toxicological Information

Phenol:

Acute inhalation, mouse - LC₅₀ = 177 mg/m³
Acute dermal, rabbit - LD₅₀ = 630 mg/kg

Formaldehyde (free):

Acute inhalation, cat - LC_{LO} = 400 mg/m³/2 hours
Acute oral, rat - LD₅₀ = 500 mg/kg

Amorphous Silica:

Acute intravenous, rat - LD₅₀ = 15 mg/kg
Acute oral, rat - LD₅₀ = 3,160 mg/kg

Section 12 --- Ecological Information

Phenol-formaldehyde polymers have a very low rate of biodegradation. Bio-accumulation is expected to be minimal. Unreacted phenolic monomer may be leached into ground water even after normal curing has occurred. Protect all waterways. Toxicity is expected to be low based on the insolubility in water of this product.

Section 13 --- Disposal Considerations

Disposal of all waste including containers in accordance with applicable, federal, state and local Environmental regulations.

Section 14 --- Transport Information

DOT Proper Shipping Name: Flexsil Coated Filter Fabric
DOT Hazardous Class: None
DOT UN/NA Number: None
Emergency Response Guide Number: None

Section 15 --- Regulatory Information

Component	CERCLA Hazardous Substance (Section 102)	CERCLA Reportable Quantity (Lbs.)	CWA NPDES Discharge (Section 307(a))	CAA Section 112	SARA Toxic Chemical (40 CFR 372)	SARA Extremely Hazardous Substance (40 CFR 355)
7631-86-9	---	---	---	---	---	---
9003-35-4	---	---	---	---	---	---
108-95-2	X	1,000	X	X	X	X
50-00-0	X	100	X	X	X	X

Components listed as OSHA air contaminants are found in Section 2 of this MSDS.

Section 16 --- Other Information

The following chemicals are subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40 CFR 372: Phenol and formaldehyde

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