

**Material Safety Data Sheet**  
**Havaflex TA-117 (Part "A")**

**AMETEK**  
**Chemical Products Division**

Prepared 2/06  
Revision 2

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**Section 1 --- Chemical Product and Company Identification**

Trade Name: Havaflex TA-117 (Part "A")

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>
Epoxy Resins	028064-14-4	Proprietary	None	None
	041638-13-5	Proprietary	None	None
	025085-99-8	Proprietary	None	None
Alkyl Glycidyl Ether	068609-97-2	Proprietary	None	None
Tetrabromobisphenol A	79-94-7	Proprietary	None	None
Aluminum Oxide	21645-51-2	Proprietary	None	None
Potassium Alumina Silicate	12001-26-2	Proprietary	20 ppm*	3 mg/m <sup>3</sup> **
Treated Amorphous Fumed Silica	67762-90-7	Proprietary	None	None
Bis (2,2,6,6-Tetramethyl-4 Piperidinyl)	52829-07-9	<1	None	None
Sebacate				
Cyclohexanone	108-94-1	<1	50 ppm	25 ppm
Tribromobisphenol A	6386-73-8	<1	None	None
Crystalline Silica	14808-60-7	1	A	0.05B
Silicon Dioxide, Amorphous	7631-86-9	Proprietary	80 mg/m <sup>3</sup>	None
Titanium Dioxide	13463-67-7	Proprietary	15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>

\* Millions of particles per cubic foot of air

\*\* particulate matter containing no asbestos and < 1% crystalline silica.

A = Respirable dust: 250% SiO<sub>2</sub> + 5 millions of particles per cubic foot of air (mppcfa); % of crystalline silica based on airborne samples.

B = Respirable fraction of particulate matter for the substance listed. The concentration of respirable dust for the application of this limit is to be determined from the fraction passing a size-selector with the characteristics defined in the "c" paragraph of Appendix D.

**Section 3 --- Hazard Information**

**Appearance and Odor:** White-colored heavy paste-like material with characteristic resin odor.

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

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

**Effects of Overexposure:**

**Inhalation:** Excessive exposure may cause irritation to upper respiratory tract.

**Eye:** May cause slight eye irritation

**Skin:** Prolonged or repeated exposure may cause skin irritation.

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### Section 3 --- Hazard Information (cont.)

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**Ingestion:** Not expected to be a source of exposure in normal industrial use.

**Carcinogenicity**

IARC Class 1 (carcinogenic to humans): Crystalline silica

IARC Class 3 (not classifiable as to carcinogenicity to humans): Amorphous silicon dioxide, titanium dioxide, and cyclohexanone

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### Section 4 --- First Aid Measures

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**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 mild 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.

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### Section 5 --- Fire Fighting Measures

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**Flash Point:** >400°F, ASTM Method, D 92, Cleveland Open Cup

**Autoignition Temperature:** None reported

**Lower Explosive Limit:** None reported

**Upper Explosive Limit:** None reported.

**Extinguishing Media:** Carbon dioxide or dry chemical.

**Unusual Fire or Explosion Hazards:** Under fire conditions polymers decompose. The smoke may contain unidentified toxic and/or irritating compounds. Hazardous combustion products may include and are not limited to carbon monoxide, carbon dioxide.

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

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### Section 6 --- Accidental Release Measures

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Use appropriate safety equipment. Absorb spills with sand or other non-combustible absorbent and place in waste containers. Dispose of all waste materials according to federal, state, and local environmental regulations.

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### Section 7 --- Handling and Storage

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**Handling:** Avoid unnecessary skin contact. Handle with care. Handle in well-ventilated area. Use safety glasses with sideshields and impervious gloves whenever handling this material. Allow material to come to room temperature for 24 hours before mixing.

**Storage:** Store Materials in closed containers at room temperature but not over 100°F. Protect containers from physical damage. Shelf life up to one year.

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## Section 8 --- Exposure Controls and Personal Protection

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**Engineering Control and Ventilation:** General ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

**Respiratory Protection:** None required when adequate ventilation conditions exist. Wear a NIOSH approved air purifying respirator if respiratory irritation is experienced.

**Eye Protection:** Wear safety glasses with side shields and /or goggles as necessary to prevent material from entering eyes.

**Skin Protection:** Use impervious gloves such as neoprene, nitrile, or rubber for hand protection. These should be worn one day only if exposed to particulates, and washed before reuse.

**Other Protective Equipment:** Eyewash fountain and safety shower should be in the immediate area.

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## Section 9 --- Physical and Chemical Properties

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**Physical State:** White, heavy paste-like material

**Appearance/Odor:** Fruity odor.

**Solubility:** Insoluble

**Specific Gravity (H<sub>2</sub>O=1):** 1.5 gm/cc

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## Section 10 --- Stability and Reactivity

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**Stability:** Product is stable under normal laboratory conditions, however, excessive heating over long periods of time will degrade the resin.

**Chemical Incompatibilities:** Mineral acid and strong oxidizing agents.

**Hazardous Decomposition Products:** Under fire conditions polymers decompose. The smoke may contain unidentified toxic and/or irritating compounds. Hazardous combustion products may include and are not limited to carbon monoxide, carbon dioxide.

**Hazardous Polymerization:** Hazardous polymerization will not occur under normal conditions.

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## Section 11 --- Toxicological Information

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### **Cyclohexanone:**

Acute oral, rabbit - LD<sub>LO</sub> = 1,600 mg/kg

Acute oral, mouse – LD<sub>50</sub> = 1,400 mg/kg

### **Crystalline Silica:**

Acute inhalation, mouse - TC<sub>LO</sub> = 40 mg/kg

Acute intravenous, dog - LD<sub>LO</sub> = 20 mg/kg

### **Silicon Dioxide, Amorphous:**

Acute intravenous, rat - LD<sub>LO</sub> = 15 mg/kg

Acute oral, rat – LD<sub>50</sub> = 3,160 mg/kg

### **Titanium Dioxide:**

Acute intratracheal, mouse - TD<sub>LO</sub> = 100 mg/kg

Acute oral, rat – TD<sub>LO</sub> = 60 gm/kg

### **Epoxy Resins:**

System effects: Except for skin sensitization, repeated exposures to the epoxy resins of the type used in this product are not anticipated to cause any significant adverse effects.

**Section 12 --- Ecological Information**

No information is available.

**Section 13 --- Disposal Considerations**

Collect spilled material and place in sealed containers for reclamation or disposal. Recycle or dispose of material according to local, state, and federal regulations.

**Section 14 --- Transport Information**

DOT Proper Shipping Name: Havaflex TA-117, Part “A”  
DOT Hazardous Class: None  
DOT UN/NA Number: None  
Emergency Response Guide Number: None

**Section 15 --- Regulatory Information**

Component (CAS #)	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)
028064-14-4	---	---	---	---	---	---
041638-13-5	---	---	---	---	---	---
025085-99-8	---	---	---	---	---	---
068609-97-2	---	---	---	---	---	---
79-94-7	---	---	---	---	X	---
21645-51-2	---	---	---	---	---	---
12001-26-2	---	---	---	---	---	---
67762-90-7	---	---	---	---	---	---
52829-07-9	---	---	---	---	---	---
108-94-1	X	5,000	---	---	---	---
6386-73-8	---	---	---	---	---	---
14808-60-7	---	---	---	---	---	---
7631-86-9	---	---	---	---	---	---
13463-67-7	---	---	---	---	---	---

The listed components by themselves are not classified as RCRA hazardous wastes. However, certain compounds containing some components, or certain processing of some components, may produce hazardous wastes. Consult 40 CFR 261 for classification and lists of hazardous wastes.

**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: Tetrabromobisphenol A

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