

AMETEK[®]
CHEMICAL PRODUCTS DIVISION
900 GREENBANK ROAD
WILMINGTON, DE 19808
TELEPHONE: (302) 995-0400
FAX: (302) 995-0491
www.ametekhaveg.com



Material Safety Data Sheet

MSDS #23-C
Date Printed 09/26/02

Product: HAVAFLEX TA-117 Q.C. (PART "B")

1. Chemical Product and Company Identification

Trade Name Havaflex TA-117 Q.C. (Part "B")

Synonyms None

Manufacturer

AMETEK, INC., CHEMICAL PRODUCTS DIVISION
HAVEG SITE
900 Greenbank Road
Wilmington, DELAWARE 19808

**24 HOUR EMERGENCY ASSISTANCE: CHEMTREC
(800) 424-9300**
Phone Product Information (302) 995-0400
Date September 26, 2002

Description

No Hazard Rating is available for this Product

2. Composition and Information on Ingredients

Ingredient(s)	CAS Number	Percent (W/W)
Phenolic Resin	9003-85-4	Proprietary Information
Phenol (Free)	108-95-2	<4.3
Formaldehyde (Free)	50-00-0	0.17
Ethyl Alcohol	64-17-5	Proprietary Information
Amidoamine Resin	64754990	Proprietary Information
Cycloaliphatic Amine	Mixture	Proprietary Information
Polythioether Polymer	Not Assigned	Proprietary Information
Antimony Trioxide	1309-64-4	Proprietary Information
Treated Amorphous Fumed Silica	67762-90-7	Proprietary Information
Potassium Alumina Silicate	12001-26-2	Proprietary Information
Cyclohexanone	108-94-1	<1
Isophoronediamine	2855-13-2	Proprietary Information
Diethylene Triamine	111-40-1	Proprietary Information
Aminoethylpiperazine	140-31-8	Proprietary Information
Arsenic	7440-38-2	<0.01

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Lead	7439-92-1	<0.02
Crystalline Silica	14808-6-7	3.6 – 4.8
Thiodiglycol	000111-48-8	Proprietary Information
Carbon Black	1333-86-4	<1

3. Hazard Identification

Emergency Overview:

Gray-colored, viscous, but pourable material, slight odor. Keep container tightly sealed when not in use and do not breathe vapors unnecessarily.

Effects of Overexposure:

Eye Contact: May cause slight eye irritation.

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

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

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

Primary routes of entry:

Skin contact, inhalation, ingestion & eye contact.

Carcinogenicity Information:

This product contains crystalline silica which is listed by IARC and NTP as a carcinogen, but it is not regulated by OSHA. See Section 11 for additional details.

4. First Aid Information

Eye Contact: Flush eyes immediately with large amounts of water for at least 15 minutes holding eyelids open while flushing. Seek medical attention immediately.

Skin Contact: Remove contaminated clothing. Wash contaminated skin in flowing water or shower.

Inhalation: Remove person from source of exposure to fresh air and then seek medical attention immediately.

Ingestion: Seek medical attention immediately.

5. Fire Fighting Measures

Flash Point: 188°F, ASTM Method, D 92, Cleveland Open Cup

Lower Explosive Limit (%): N.D.

Upper Explosive Limit (%): N.D.

Autoignition Temperature: N.D.

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Extinguishing Media: Foam, carbon dioxide or dry chemical.

Unusual Fire & 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 Instructions: Wear full fire fighting protective equipment including self-contained breathing apparatus.

6. Accidental Release Measures

Steps to be taken in case material is released or spilled:

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.

7. Handling and Storage

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 material in tightly closed containers at 40°F or lower.

8. Exposure Controls and Personal Protection

ENGINEERING CONTROLS:

Ventilation:

Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

Respiratory Protection:

If respiratory irritation is experienced, use a NIOSH approved air-purifying respirator.

Eye Protection:

Wear safety glasses with side shields or chemical safety goggles.

Protective Clothing:

Use protective clothing and gloves impervious to this material.

Other Protective Equipment:

Eye wash fountain, safety shower.

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Hygienic Practices:

Use good personal hygiene practices.

EXPOSURE LIMITS:

Phenolic Resin

PEL (OSHA) N.E.

TLV (ACGIH) N.E.

Phenol (Free)

PEL (OSHA) 5 ppm (skin)

TLV (ACGIH) 5 ppm (skin)

Formaldehyde (Free)

PEL (OSHA) 0.75 ppm

STEL 2 ppm

TLV (ACGIH) (C) 0.3 ppm

Ethyl Alcohol

PEL (OSHA) 1,000 ppm

TLV (ACGIH) 1,000 ppm

Amidoamine Resin

PEL (OSHA) N.E.

TLV (ACGIH) N.E.

Cycloaliphatic Amine

PEL (OSHA) N.E.

TLV (ACGIH) N.E.

Polythioether Polymer

PEL (OSHA) N.E.

TLV (ACGIH) N.E.

Antimony Trioxide

PEL (OSHA) 0.5 mg/m³

PEL as Sb

TLV (ACGIH) 0.5 mg/m³ as Sb

Treated Amorphous Fumed Silica

PEL (OSHA) 20 mppcf

TLV (ACGIH) 10mg/m³

Potassium Alumina Silicate

PEL (OSHA) 20 mppcf

TLV (ACGIH) 3 mg/m³

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Cyclohexanone

PEL (OSHA) 25 ppm (skin)

TLV (ACGIH) 25 ppm (skin)

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Isophoronediamine

PEL (OSHA) N.E.

TLV (ACGIH) N.E.

Diethylene Triamine

PEL (OSHA) None

TLV (ACGIH) 1 ppm (skin)

TLV (ACGIH) NIOSH 1 ppm

4 mg/m³ (skin)

Aminoethylpiperazine

PEL (OSHA) N.E.

TLV (ACGIH) N.E.

Arsenic

PEL (OSHA) 10 microg/m³

TLV (ACGIH) 0.2 mg/m³

NOTATION Action Limit OSHA 5 microg/m³

Lead

PEL (OSHA) 50 microg/m³

TLV (ACGIH) 0.15 mg/m³

NOTATION Action Limit OSHA 30 microg/m³

Crystalline Silica

PEL (OSHA) 10 mg/m³ ÷ % SiO₂ + 2

TLV (ACGIH) 0.05 mg/m³ (respirable)

Thiodiglycol

PEL (OSHA) N.E.

TLV (ACGIH) N.E.

Carbon Black

PEL (OSHA) 3.5 mg/m³

TLV (ACGIH) 3.5 mg/m³

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9. Physical and Chemical Properties

PHYSICAL DATA:

Boiling Point: N.A.
Melting Point: N.A.
Solubility in Water: Insoluble
Vapor Pressure: N.A.
Vapor Density: N.A.
Specific Gravity: 1.158
Color: Gray
Odor: Slight odor
Physical State: Highly viscous, but pourable material

10. Stability and Reactivity

Chemical Stability – Product is stable at normal temperature and storage conditions, however, excessive heating over long periods of time will degrade the resin.

Incompatibilities – Mineral acids and strong oxidizing agents.

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

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.

11. Toxicological Information

Crystalline Silica

IARC evaluation was that crystalline silica inhaled in the form of quartz from occupational sources is carcinogenic to humans (Group 1). NTP also concluded that crystalline silica (respirable) may reasonably be anticipated to be a carcinogen, based on sufficient evidence in experimental animals and limited evidence in humans. Crystalline silica is not regulated by OSHA.

Antimony Trioxide

IARC concluded that evidence for the carcinogenicity of antimony trioxide in humans is inadequate, based on limited epidemiological studies among antimony workers. However, based on short- and long-term dosing of laboratory animals with antimony trioxide, tumors were observed in the lungs of female rats. Based on this evidence, IARC classified antimony trioxide as "possibly carcinogenic to humans" (Class 2B).

Lead, a minor contaminant (<0.4%) of antimony trioxide, is also classified by IARC as "possibly carcinogenic to humans."

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Arsenic, also a minor contaminant (<0.4%) of antimony trioxide, is listed as a substance that is "known to be carcinogenic" by NTP, is classified as "carcinogenic to humans" by IARC, and is regulated by OSHA as a carcinogen.

The materials listed above are completely encapsulated in resin, and therefore, do not present a potential dust inhalation problem unless the product itself is altered by some mechanical means.

12. Ecological Information

No information is available.

13. Disposal Considerations

Dispose of all waste material including containers in accordance with applicable federal, state, and local environmental regulations.

14. Transportation Information

DOT Proper Shipping Name: Havaflex TA-117 Q.C. (Part B)
DOT Hazardous Class: None
DOT UN/NA Number: None
Emergency Response Guide Number: None

15. Regulatory Information

U.S. Federal Regulations as Follows:

SARA Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372:
Phenol, Formaldehyde, Lead, Antimony

TSCA:

The chemical substances in this product are on the TSCA Section 8 Inventory.

EXPORT NOTIFICATION:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:
None

INTERNATIONAL REGULATIONS: AS FOLLOWS:

Canadian WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.
Canadian WHMIS CLASS: Not Regulated.

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DSL:

The chemical substances in this product are listed on the Domestic Substances List (DSL).

16. Other Information

This Material Safety Data Sheet was revised in its entirety in March 2001.

ABBREVIATIONS:

- 1) ACGIH – American Conference of Governmental Industrial Hygienists
- 2) OSHA – Occupational Safety and Health Administration
- 3) NIOSH – National Institute for Occupational Safety and Health
- 4) IARC – International Agency for Research on Cancer
- 5) NTP – National Toxicology Program
- 6) TLV – Threshold Limit Value
- 7) PEL – Permissible Exposure Limit
- 8) TWA – Time Weighted Average
- 9) STEL – Short Term Exposure Limit
- 10) IDLH – Immediately Dangerous to Life or Health
- 11) N.A. – Not Applicable
- 12) N.D. – Not Determined
- 13) N.E. – Not Established
- 14) DSL – Domestic Substances List

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