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Material Safety Data Sheet

MSDS #14
Date Printed 07/19/01

Product: HAVEG 6800 FURAN RESIN

1. Chemical Product and Company Identification

Trade Name Haveg 6800 Furan Resin

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
Revision Date October 2000

Description

No Hazard Rating is available for this Product

2. Composition and Information on Ingredients

Ingredient(s)	CAS Number	Percent (W/W)
Furfuryl Alcohol/Formaldehyde Polymer	Not Assigned	Proprietary Information
Furfuryl Alcohol (Free)	98-00-0	Proprietary Information
Formaldehyde (Free)	50-00-0	<0.1
Methyl Alcohol	67-56-1	0.15

3. Hazard Identification

Emergency Overview:

Dark brown, very low viscosity liquid with characteristic furfuryl alcohol odor. Keep container tightly closed when not in use and do not breathe vapors unnecessarily. Do not allow this product to come in contact with strong mineral acids, such as sulfuric acid or hydrochloric acid, in order to prevent danger of violent exotherm occurring.

Effects of Overexposure:

Eye Contact: Causes irritation to the eyes.

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Skin Contact: May be irritating to the skin, and repeated contact with the skin may cause skin rash or allergic reactions in some individuals.

Inhalation: Vapors may be irritating to the respiratory tract.

Ingestion: Furfuryl alcohol is poisonous.

Carcinogenicity Information:

Formaldehyde

POTENTIAL CANCER HAZARD (A2)

Based on animal data and limited epidemiological evidence, NTP and IARC have listed formaldehyde as a probable human carcinogen. OSHA regulates formaldehyde as a potential human carcinogen. May cause allergic skin reaction. Some reports suggest that formaldehyde may cause respiratory sensitization, such as asthma.

Furfuryl Alcohol

Not listed by NTP, IARC, or regulated by OSHA.

Primary routes of entry:

Skin contact, inhalation, ingestion & eye contact.

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 thoroughly with mild soap and cool water. Seek medical attention if irritation persists.

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: >210° F, ASTM Method, D 93 (PM CC)

Lower Explosive Limit (%): N.D.

Upper Explosive Limit (%): N.D.

Autoignition Temperature: N.D.

Extinguishing Media: Carbon dioxide or dry chemical.

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Unusual Fire & Explosion Hazards: Acid contamination can cause violent, exothermic polymerization. Also during a fire, combustion products of formaldehyde may be released as well as other combustion products, such as carbon monoxide and/or 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:

1. Cover spill with sand or other non-combustible absorbent material. Place waste materials in covered container for disposal.
2. Dispose of all waste materials according to federal, state, and local environmental regulations.

7. Handling and Storage

Handling

1. Avoid skin contact. Handle with care.
2. Handle in well-ventilated area.
3. Use safety glasses with sideshields or chemical goggles, and neoprene gloves whenever handling this material.

Storage

Store material in closed containers, in a cool, well-ventilated location, away from ignition sources, acids and oxidizers.

8. Exposure Controls and Personal Protection

ENGINEERING CONTROLS:

Ventilation:

General ventilation and/or local exhaust ventilation as well as process isolation may be used to minimize employee exposure and maintain exposures below the TLV.

Respiratory Protection:

Use NIOSH approved full-face respiratory protection equipment where air contaminants exceed acceptable criteria.

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.

Protective Clothing:

Wear protective neoprene gloves as required to prevent skin contact. Full body protective clothing should be worn in the event of a spill or other emergency.

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Other Protective Equipment:
Eye wash fountain, safety shower.

Hygienic Practices:
Use good personal hygiene practices.

EXPOSURE LIMITS:

	<u>OSHA (PEL)</u>	<u>ACGIH</u>	<u>NOTATIONS</u>
Furfuryl Alcohol/Formaldehyde Polymer	N.E.	N.E.	
Furfuryl Alcohol (Free)	50 ppm (skin)	10 ppm STEL 15 ppm	
Formaldehyde (Free)	0.75 ppm STEL 2 ppm	(C) 0.3ppm	A2
Methyl Alcohol	200 ppm (260 mg/m ³)	200 ppm STEL 250 ppm	

9. Physical and Chemical Properties

PHYSICAL DATA:

Boiling Point: 260° F
Melting Point: N.A.
Solubility in Water: Moderately soluble
Vapor Pressure: N.D.
Vapor Density: N.D.
Specific Gravity: 1.19
pH: 4.5-4.9
Color: Dark brown
Odor: Characteristic furfuryl alcohol odor
Physical State: Very low viscosity liquid

10. Stability and Reactivity

Chemical Stability – Product is stable at normal conditions and storage conditions.

Incompatibilities – Strong mineral acids and oxidizers. Use of excess acidic catalysts will result in rapid polymerization.

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

Hazardous Decomposition Products: The combustion products of furfuryl alcohol, possible traces of formaldehyde, and carbon monoxide and/or carbon dioxide.

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11. Toxicological Information

Formaldehyde 50-00-0

Formaldehyde is currently listed as a suspected carcinogen by IARC and is also in the "D" list of suspected carcinogens as defined by Proposition 65 under California law.

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: Furfuryl Alcohol, Mixture

DOT Hazardous Class: 6.1

DOT UN/NA Number: UN2874

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:

Formaldehyde: 50-00-0

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:

Formaldehyde

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.

DSL:

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

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16. Other Information

This Material Safety Data Sheet was revised in its entirety in October 2000.

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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