

**MATERIAL SAFETY DATA SHEET**

This Material Safety Data Sheet (MSDS) contains toxicology, industrial hygiene, and environmental information for your employees. Please make sure they are provided with this information. It also contains information to assist with meeting community right-to-know and emergency response reporting requirements under SARA Title III and other laws. If you resell this product, provide the buyer with this MSDS or incorporate this information into a new MSDS. Disregard any previous edition of this MSDS. This MSDS was prepared according to the OSHA Hazard Communication Standard (29 CFR §1910.1200) and the ANSI MSDS Standard (ANSI Z400.1) by HAZARD INFORMATION SERVICES<sup>SM</sup>, 8100 34<sup>th</sup> Avenue South, P.O. Box 1309, Minneapolis, MN 55440-1309.

**SECTION 1 CHEMICAL PRODUCTS AND COMPANY IDENTIFICATION****MATERIAL NAME:** HOTLINE FIBER MOLD HARDNER**MANUFACTURER:** Creative Craftsmen Co., Inc.  
27625 Diehl Road  
Warrenville, IL 60555**TELEPHONE NUMBERS:**PRODUCT INFORMATION: Creative Craftsmen Co., Inc.  
~~1-708-416-0448~~ 1-630-836-1353MEDICAL EMERGENCIES (24 HR):  
PROSAR PRODUCT SAFETY SOURCES  
1-888-215-4878**SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS**

MATERIAL	CAS #	%	EXPOSURE LIMITS	REFERENCES
Ethylene glycol (1,2-Ethanediol)	107-21-1	18.2	100 mg/m <sup>3</sup> -TLV (C) [aerosol] 125 mg/m <sup>3</sup> (50 ppm) PEL (C) <i>C - Ceiling value</i>	ACGIH 96 OSHA 89 (vacated)
Amorphous Silica	7631-86-9	10 - 11.7	80 mg/m <sup>3</sup> divided by % SiO <sub>2</sub> or 20 mppcf TWA-PEL <i>(mppcf=million particles/ft<sup>3</sup> air)</i> 6 mg/m <sup>3</sup> TWA-PEL 6 mg/m <sup>3</sup> TWA REL 3000 mg/m <sup>3</sup> IDLH	OSHA (29CFR1910) Table Z-3 for mineral dusts OSHA 89 (vacated) NIOSH 94 NIOSH 94
Water	7732-18-5	70 - 72	None	NA

None - No exposure limits available from OSHA, ACGIH, NIOSH or AIHA

**SECTION 3 HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW**

APPEARANCE AND ODOR: Clear colorless liquid

STATEMENT OF HAZARD: **CAUTION!**ACUTE HAZARDS:

- Contact with this product may irritate the eyes.
- May cause mild to moderate skin irritation.
- Ingestion of large amounts may be harmful or fatal, smaller amounts may cause gastrointestinal irritation.

1996 North American Emergency Response Guidebook: NA

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**POTENTIAL EXPOSURE ROUTES:** Eyes, skin contact, ingestion, inhalation. Under normal use conditions exposure may occur if the product is rubbed in the eyes, contacts the skin, vapors or mists are inhaled or if a small amount is accidentally ingested.

**POTENTIAL HEALTH EFFECTS:** The degree of injury will depend upon exposure dose, duration of exposure, and speed and thoroughness of first aid treatment.

**ACUTE EFFECTS**

**Local Effects (eyes, skin, nose, throat, stomach, etc...)**

- Contact with skin may cause irritation to skin.
- Contact with the eyes may scratch cornea of eye.
- Swallowing large amounts may irritate the gastrointestinal tract. Consumption of very large amounts may be fatal.

**Systemic Effects**

- Ingestion of large amounts may cause liver and kidney damage.

**SUB-CHRONIC EFFECTS:** NDA

**NON-CARCINOGENIC CHRONIC EFFECTS:** No chronic effects were identified.

**REPRODUCTIVE OR DEVELOPMENTAL EFFECTS:** None of the components of this product (Section 2) are listed on the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) list of chemicals known to cause reproductive toxicity.

**CANCER:** The components of this product (Section 2) are not listed as carcinogens or potential carcinogens by NTP, IARC or OSHA (see 29 CFR 1910.1200(g)(2)(vii)). None of the components of this product (Section 2) are listed on the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) list of chemicals known to cause cancer. NIOSH identifies amorphous fused silica as a potential human carcinogen.

**POSSIBLE TARGET ORGANS:** Eyes, skin, kidney, liver

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** NDA

**SECTION 4 FIRST AID MEASURES**

**EYE CONTACT:** Immediately flush with water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention if irritation persists.

**SKIN CONTACT:** Remove contaminated clothing. Flush with plenty of water. Wash affected area with mild soap and water. Get medical attention if irritation persists.

**INGESTION:** Immediately rinse mouth out with plenty of water. If within 30 minutes after ingestion, give a small glass of water. NEVER give anything by mouth to an unconscious person. Consult with your physician or poison control center. Do not induce vomiting unless instructed to do so by a physician or poison center.

**INHALATION:** Remove to fresh air. Seek medical attention if breathing becomes difficult.

**SECTION 5 FIRE FIGHTING MEASURES**

**NFPA RATING:** H-1 F-1 R-0      **FLASH POINT:** >232 °F (> 111 °C)

**UPPER EXPLOSIVE LIMIT:** NDA      **LOWER EXPLOSIVE LIMIT:** NDA

**AUTOIGNITION TEMPERATURE:** NDA

**EXTINGUISHING MEDIA:** Use media appropriate to the surrounding fire conditions.

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**FIRE FIGHTING INSTRUCTIONS:** Wear appropriate protective clothing. Use self-contained breathing apparatus. Keep runoff from fire control from entering steams, sewers or drinking water supply.

**COMBUSTION PRODUCTS:** Silicon dioxide, aluminum-containing compounds, carbon dioxide and carbon monoxide.

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

**GENERAL:** Do not attempt to clean chemical spills without appropriate personal protective equipment (see Section 8). Extinguish or remove all ignition sources. If a paste, pick up mechanically or with a liquid binding material. If dry, vacuum or sweep material and place in a disposal container. Keep waste out of sewers, watersheds and waterways, see Section 13 for information on the disposal of recovered material.

**CERCLA REPORTABLE QUANTITIES (RQ):** None

**SECTION 7 HANDLING AND STORAGE**

**GENERAL:** Store containers upright in a cool, dry, well ventilated area out of direct sunlight. Use with adequate ventilation and store away from incompatible materials (see Section 10). Use with proper personal protective equipment (see Section 8). Empty containers may retain hazardous properties-follow all MSDS/label warnings even after containers are emptied. Do not reuse empty container for food, clothing, or products for human consumption. Keep this and all chemicals out of reach of children.

**STORAGE TEMPERATURE:** Ambient

**STORAGE PRESSURE:** Atmospheric

**SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

**RESPIRATORY PROTECTION:** None required under normal use. The product is a liquid and is unlikely to generate a dust. Airborne concentrations must be maintained below the exposure limits or respiratory protection is needed. If respiratory protection is necessary, seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134). If there is potential for an uncontrolled release, or exposure levels are not known, or there are any other circumstances where air purifying respirators may not provide adequate protection, use a positive pressure air supplied respirator.

**EYE PROTECTION:** Wear safety glasses, chemical goggles, or face shield as necessary to prevent eye contact.

**PROTECTIVE CLOTHING:** Skin contact may be prevented by wearing chemically resistant gloves.

**VENTILATION:** Use appropriate local or general exhaust ventilation to minimize airborne concentrations and prevent atmospheric concentrations from reaching the exposure limit(s) (Section 2).

**SAFETY EQUIPMENT:** Eyewash and safety shower

**GENERAL:** Use with good personal and industrial hygiene practices. Wash thoroughly after using product. Keep product off clothing and equipment. Launder contaminated clothing before reuse. Do not eat, drink or smoke in any work area. It is always good industrial hygiene practice to limit, to the extent feasible, skin and eye contact and inhalation of chemical products.

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**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES****APPEARANCE AND ODOR:** Clear colorless liquid**BOILING POINT:** NDA**VAPOR PRESSURE:** NDA**SPECIFIC GRAVITY:** NDA**VAPOR DENSITY (AIR = 1):** NDA**SOLUBILITY IN WATER:** NDA**VOLATILES (% BY VOL.):** 18.2 %**EVAPORATION RATE:** NDA**FLASH POINT:** > 232 °F (>111 °C)**SECTION 10 STABILITY AND REACTIVITY****GENERAL:** This product will not polymerize. This product is stable.**CONDITIONS TO AVOID:** High temperatures**INCOMPATIBILITY (MATERIALS AND CONDITIONS TO AVOID):** Strong oxidizers, strong acids, alkali's. Always test the compatibility of materials before mixing or storing them together.**HAZARDOUS DECOMPOSITION PRODUCTS:** Silicon dioxide, carbon dioxide and carbon monoxide.**SECTION 11 TOXICOLOGY INFORMATION**

This section provides relevant information with regard to any toxicity studies performed on the product, or the "pure" form of the component(s). This information can be subject to misinterpretation. Therefore, it is essential that the following information be interpreted by individuals trained in its evaluation. For assistance with interpreting this information, contact **HAZARD INFORMATION SERVICES<sup>SM</sup>** at 1-800-228-5635 Ext. 115 or (612)221-3999 Ext. 115, 24 hours-a-day.

**PRODUCT BASED:** Based on the product components contact with this product may produce eye irritation. On prolonged or repeated exposure skin irritation may occur. Although not an expected occurrence, ingestion of large quantities may be harmful or fatal.

**INGREDIENT BASED:****Ethylene Glycol (CAS # 107-21-1)****EYE EFFECTS:** Causes irritation and mild conjunctivitis**SKIN EFFECTS:** Causes mild skin irritation. Prolonged skin contact with large amounts may result in the absorption of harmful amounts.**ORAL EFFECTS:** May cause nausea, vomiting and diarrhea. Ingestion of large amounts may cause central nervous system depression, cardiopulmonary symptoms (mild high blood pressure, tachypnea and rapid heartbeat), kidney and liver damage, and metabolic acidosis. The minimum lethal human-oral dose is approximately 100 mL in adults. The rat-oral LD<sub>50</sub> is 4,700 mg/kg.**INHALATION EFFECTS:** Inhalation of vapors or mists causes upper respiratory tract irritation. Inhalation of concentrated vapors or mists may also cause central nervous system depression and liver and kidney damage.**MUTAGENICITY:** Ethylene glycol has been found to be non-mutagenic in *in vitro* studies.**CARCINOGENICITY:** Exposure to ethylene glycol is not expected to result in carcinogenic effects.**DEVELOPMENTAL OR REPRODUCTIVE EFFECTS:** High concentrations of ethylene glycol have been shown to cause adverse developmental effects in a limited number of animal studies. Ethylene glycol has been shown to produce birth defects when orally administered to pregnant mice and rats. The no effect levels (NOEL) from these studies were 150 mg/kg/day and 500 mg/kg/day, respectively.

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**Amorphous Silica (CAS # 7631-86-9)**

**EYE EFFECTS:** Eye contact with amorphous silica can cause mild irritation.

**SKIN EFFECTS:** Skin contact with amorphous silica may possibly cause mild irritation due to mechanical action.

**ORAL EFFECTS:** Essentially nontoxic by ingestion.

**INHALATION EFFECTS:** Inhalation of large amounts of amorphous silica may cause irritation to the upper respiratory tract and pneumoconiosis. Chronic inhalation exposure is not likely to result in lung fibrosis.

**MUTAGENICITY:** NDA

**CARCINOGENICITY:** IARC has determined that amorphous silica is not classifiable as to its carcinogenicity based on inadequate data in humans or experimental animals (IARC Group 3).

**DEVELOPMENTAL OR REPRODUCTIVE EFFECTS:** Limited experimental data suggests that exposure to amorphous silica is not expected to result in adverse reproductive effects. There are no data available addressing the potential developmental effects following exposure.

**SECTION 12 ECOLOGICAL INFORMATION**

**ECOTOXICITY:** Ethylene glycol is slightly toxic to fish. Reported LC<sub>50</sub>'s for ethylene glycol, measured in several aquatic species and under a range of water quality conditions, ranged from 16 mg/L to 49,300 mg/L. Amorphous silica occurs naturally in soil and the environment.

**ENVIRONMENTAL FATE:** Ethylene glycol is water soluble and is readily biodegradable in water. It is not expected to adsorb to sediment or volatilize appreciably from water. It does not bioconcentrate significantly in fish.

**SECTION 13 DISPOSAL CONSIDERATIONS**

**RCRA HAZARD NUMBER(S):** None.

**WASTE DISPOSAL:** Consult a local expert for advice on the disposal of this material. Characteristics of waste material may differ from those of original material. Ensure that disposal is in compliance with local, state and federal regulations. Under RCRA it is the responsibility of the product user to determine at the time of disposal whether a material containing the product or derived from the product should be classified as a hazardous waste (40 CFR 261.20-24).

**SECTION 14 TRANSPORTATION INFORMATION**

**D.O.T. PROPER SHIPPING NAME:** Not regulated as a hazardous material

**SECTION 15 REGULATORY INFORMATION**

**TSCA, DSL/NDL, EINECS STATUS:** Ethylene glycol and amorphous silica are each listed in the TSCA, EINECS and DSL inventories.

**CERCLA REPORTABLE QUANTITY (RQ) (40 CFR Table 302.4):** None

**SARA TITLE III (Superfund Amendments and Reauthorization Act)**

- **Section 302 Extremely Hazardous Substances (40 CFR 355):** Not listed
- **Section 304 Notification of Accidental Release (40 CFR 355):** Not listed under 40 CFR 355 or 40 CFR Table 302.4.

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- **Section 311/312 Hazard Categories (40 CFR 370):** This product has been reviewed according to the EPA hazard categories promulgated under Section 311 and 312 of SARA and is considered, under applicable definitions, to meet the following categories:

Immediate (acute) health effects:	Yes
Delayed chronic health effects:	Yes
Fire Hazard:	No
Sudden Release of Pressure Hazard:	No
Reactivity Hazard:	No

- **Section 313 Toxic Chemical Release Inventory (40 CFR 372.65(a)):** Not listed

**STATE REGULATORY INFORMATION:** Since each state has the authority to promulgate standards more stringent than the federal government, this section cannot provide an inclusive list of all state regulations which may apply to this product. Questions related to state regulations should be directed toward local officials.

<b>SECTION 16 OTHER INFORMATION</b>
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ISSUE DATE:	12-1-97
SUPERSEDES:	None
REASON(S) FOR ISSUE:	New product
PREPARED BY:	Lisa Herschberger, M.S., M.P.H. Occupational and Environmental Toxicologist Toxicology and Industrial Hygiene Group

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**ABBREVIATIONS**

ACGIH..... American Conference of Governmental Industrial Hygienists	NFPA ..... National Fire Protection Association
AIHA..... American Industrial Hygiene Association	NDSL ..... Canadian Non-Domestic Substance List
CERCLA.... Comprehensive Environmental Response, Compensation and Liability Act of 1980	NIOSH ..... National Institute for Occupational Safety and Health
CAS #..... Chemical Abstracts Service Number	NTP..... National Toxicology Program
CFR..... Code of Federal Regulations	OSHA..... Occupational Safety and Health Administration
DOT..... Department Of Transportation	PEL..... Permissible Exposure Limit
DSL ..... Canadian Domestic Substance List	RCRA..... Resource Conservation and Recovery Act
EINECS.... European Inventory of Existing Chemical Substances	RQ ..... Reportable Quantity
IARC..... International Agency for Research on Cancer	STEL..... Short Term Exposure Limit
IDLH..... Immediately Dangerous to Life and Health	TLV ..... Threshold Limit Value
LEL..... Lower Explosion Limit	TSCA ..... Toxic Substances Control Act
MSDS..... Material Safety Data Sheet	TWA..... Time-Weighted Average
NA ..... Not Applicable	UEL..... Upper Explosion Limit
NDA..... No Data Available	WEEL..... Workplace Environmental Exposure Level

**VERSION : 1**

**APPROVED BY: Ed Hoy**

**DATE: 12/1/97**