SAFETY DATA SHEET

SECTION 1 – MANUFACTURER/PRODUCT IDENTIFICATION:

PRODUCT IDENTITY: GLASSPRO WATER SOLUBLE FLUX (CAT. # 5001-5002-5003)

Manufacturer's (Distributor's) Name:
Creative Craftsmen Co., Inc.
27625 Diehl Road
Warrenville, Illinois 60555-3838

Emergency Telephone Number:
888- 215-4878
Information Telephone Number:
630-836-1353 Toll Free: 800-323-5668

Trade Name: GLASSPRO WATER SOLUBLE FLUX **Product Type:** Flux **Chemical Family:** Glycerin and acid

SECTION 2 – HAZARDS IDENTIFICATION:

Section 2.1: Hazard Classification:

DANGER! THIS PRODUCT IS CORROSIVE TO THE EYES, SKIN AND RESPIRATORY TRACT
IT IS TOXIC IF INHALED OR SWALLOWED

Corrosive
Causes serious skin and eye injury
Causes lung damage if inhaled

Harmful if swallowed
Harmful in contact with skin
Harmful if inhaled

PRECAUTIONARY INFORMATION:

CAUSES SKIN AND EYE CHEMICAL BURNS. BREATHING MIST AND VAPORS CAN CAUSE RESPIRATORY TRACT IRRITATION OR BURNS. INGESTION OF LARGE AMOUNTS CAN CAUSE DIGESTIVE TRACT CHEMICAL BURNS, NAUSEA AND VOMITING.

Prevent eye contact and prolonged skin contact. Utilize appropriate protective clothing and eye and skin protection. Avoid the generation and inhalation of dust and mist. Wear appropriate respiratory protection if dust/mist levels exceed exposure limits. Do not eat, drink or use tobacco products when there is potential exposure to this material. Wash hands thoroughly after handling. Prevent material from becoming airborne.
See additional information on the SDS for further details regarding the safe use of this product.

Section 2.2 Label Information:

SUBSTANCE IDENTITY: GLASSPRO WATER SOLUBLE FLUX (CAT # 5001-5002-5003)

Signal Word: DANGER
Hazardous Components: Glycerin
Hydrochloric Acid

HAZARD STATEMENT: Corrosive upon contact with eyes, skin, and the respiratory system.
Can cause irritation and burns.
Ingestion can cause kidney damage.

CAUTION: Avoid generating and breathing mist/vapor. Avoid skin and eye contact. Keep out of reach to children. Use chemical resistant personal protective equipment (gloves/clothing), safety glasses or goggles and an appropriate respirator.

EMERGENCY INFORMATION:

Eye Contact: Rinse with warm potable water for 15 minutes.
Skin Contact: Remove contaminated clothing and wash affected area.
Inhalation: Exit to fresh air. Support breathing as needed.
Ingestion: Rinse mouth. Drink milk or water if conscious.
Contact emergency personnel if medical issues need further treatment.

HMIS
Health = 3
Flammability = 0
Reactivity =1
PPE = E

HMIS=Hazardous Material Information System

PPE = E means safety glasses, protective gloves and appropriate respirator.

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SECTION 3 – HAZARDOUS INGREDIENTS INFORMATION:

This product contains material that may be hazardous when airborne as a particulate. This material is also hazardous upon contact with eyes, skin and the respiratory system.

HAZARDOUS COMPONENTS[a]:

(Specific Chemical Identity; Common Name)	CAS Number[b]	SARA[c]	OSHA PEL[d]	ACGIH TLV[e]	NOTES	PERCENT[f]
Glycerin (1,2,3-Propanetriol)	56-81-5		5 mg/m^3 15 mg/m^3	NA	As Mist Respirable Total Particulate	87.5
Hydrochloric Acid	7647-01-1	X	5 ppm (Ceiling)	2 ppm (Ceiling)	5 ppm (NIOSH Ceiling)	3.7-5.0

Notes:

a. The term "Hazardous" is defined in the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and does not necessarily imply the existence of any hazard. All components at concentrations equal to or greater than 1.0 percent (0.1 percent if a carcinogen) are listed in this section, according to OSHA 29 CFR 1910.1200.
b. The CAS Number designation is the Chemical Abstract Service Number. A CAS number is assigned to each individual chemical.
c. An asterisk (*) indicates a toxic chemical subject to Environmental Protection Agency (EPA) reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (SARA) and 40 CFR Part 372.
d. These permissible exposure limits (PELs) are based on OSHA's rulemaking (29 CFR 1910 Subpart Z) adopted in 1971 and are the current regulatory limits, unless otherwise noted. These values are reported as milligrams of contaminant per cubic meter of air (mg/m^3).
e. These values are based on the American Conference of Governmental Industrial Hygienists (ACGIH) 2010 TLVs.
f. Approximate percent by weight values. The amount of each ingredient in this product is confidential and deemed proprietary. Please contact the manufacturer for detailed information.

SECTION 4 – FIRST AID PROCEDURES:

Eyes: Hold eyelids apart and flush eyes with plenty of warm water potable for at least 30 minutes. Seek medical attention if irritation persists.

Skin: Remove contaminated clothing and wash affected area with plenty of soap and water for at least 15 minutes. If redness or irritation develops, seek medical attention. Discard or decontaminate clothing before reuse.

Inhalation: Exit to fresh air. If irritation develops, seek medical attention. Support breathing as needed. If conditions persist, seek medical attention.

Ingestion: Immediately rinse mouth with plenty of water. If within 30 minutes of ingestion, give a small glass of water. Never give anything by mouth to an unconscious person. Do no induce vomiting. Consult a physician or poison control center.

Note to Physician: Skin, eye and respiratory contact are of concern. Product is a strong acid.

SECTION 5 – FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT (Method Used): >390°F (>199°C) — This product is nonflammable and will not support combustion. Significant airborne concentrations of particulate can create flammable/explosive conditions.

FLAMMABLE LIMITS: **LEL:** NA **UEL:** NA

AUTOIGNITION TEMPERATURE NA

EXTINGUISHING MEDIA: Use extinguishing media appropriate for surrounding fire including carbon dioxide, dry chemical, foam, halon, or water mist. Neutralize with soda ash or slaked lime.

SPECIAL FIRE FIGHTING PROCEDURES: Wear appropriate protection for the surrounding fire. When fighting chemical fires wear self-contained breathing apparatus and full protective chemical resistant clothing. Do not release runoff to sewers and waterways. Cool tanks with water spray until well after fire is out.

UNUSUAL FIRE AND EXPLOSION HAZARDS: When subjected to heat and flames, toxic gases such as acrolein, hydrogen, carbon dioxide and carbon monoxide may be released.

SECTION 6 – ACCIDENTAL RELEASE MEASURES:

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Caution: This material is a liquid and is slippery on surfaces. Do not leave spills on floors unattended. Barricade spill area until cleanup is complete. Avoid stepping in spilled material. Eliminate all ignition sources.

Contain small spills using appropriate personal protective equipment including acid resistant gloves and clothing. Use appropriate containment materials including neutralizers (i.e., soda ash or slaked lime) and sand or other non-combustible absorbents. Place absorbents into appropriate containers for disposal.

During clean up of dried material avoid creating airborne dust and vapors (e.g., use wet methods). Where product is dry and may become airborne, utilize appropriate personal protective equipment such as a NIOSH approved air-purifying respirator equipped with filters approved for particulate (P-100) and acid gases. Keep spilled material and waste out of sewers and waterways. If an emergency situation exists, contact spill response personnel.

US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities.

CECLA Reportable Quantity: 5000 lbs For Hydrochloric Acid (CAS# 7647-01-0

SECTION 7 – PRECAUTIONS FOR SAFE HANDLING AND USE:

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

When not in use, store in tightly closed containers in a dry, cool, well-ventilated area. Store out of direct sunlight. Do not store with incompatible materials. Use only when wearing appropriate personal protective equipment. Use only with adequate ventilation that keeps mist/vapor at levels below the permissible exposure limit (PEL). Handle so as not to create airborne mist/vapor. Avoid breathing mist/vapor. Utilize appropriate NIOSH-approved respirator if airborne exposure exceeds the PEL. Handle with care. Avoid unnecessary eye and prolonged skin contact. Wash thoroughly after handling.

PRECAUTIONS TO BE USED DURING REPAIR AND MAINTENANCE: Not Applicable

OTHER PRECAUTIONS: Empty containers may contain residue and are considered hazardous. Do not reuse empty containers for food, clothing or for personal consumption products. Keep out of reach of children.

SECTION 8– CONTROL MEASURES/PERSONAL PROTECTION:

VENTILATION:

Local Exhaust: If necessary, use enclosures with local exhaust ventilation to keep exposures below PELs.

Mechanical: If necessary to keep mist/vapor levels below PELs. Recommended for confined areas and when handling dry material.

Special: NA.

RESPIRATORY PROTECTION (Specify Type): Under normal conditions of use, respiratory protection is not needed. Where exposure above the OSHA PEL is likely, utilize a NIOSH approved half-mask or full-face piece air-purifying respirator (APR) equipped with filters approved for acid gases and particulate. APRs do not protect workers in oxygen deficient atmospheres. If there is a potential for an uncontrolled release, exposure levels are not known, or there are circumstances where an APR may not provide adequate protection, use a positive pressure air supplied respirator.

PROTECTIVE GLOVES: Utilize chemically resistant gloves including neoprene, nitrile rubber, PVC, or butyl rubber.

EYE PROTECTION: Safety glasses with side shields, goggles or face shield.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Utilize chemically resistant clothing and boots.

SAFETY STATIONS: Make available in the work area emergency eyewash stations, safety showers and washing facilities.

WORK/HYGIENIC PRACTICES: Avoid skin and eye contact. Avoid breathing mist/vapor. Practice good personal hygiene. Do not eat, drink, smoke, or apply cosmetics in work areas. Wash face and hands prior to eating, drinking or other hand-to-mouth activities. Launder contaminated clothing before reuse.

SECTION 9 – PHYSICAL/CHEMICAL CHARACTERISTICS:

BOILING POINT:	ND	**VAPOR DENSITY (Air = 1)**	>1 (Air=1)
MELTING POINT:	ND	**VAPOR PRESSURE (mm Hg):**	NA
SPECIFIC GRAVITY:	Less than 1.5 (H_2O = 1)	**EVAPORATION RATE**	
Bulk Density:	NA	**(Butyl Acetate = 1):**	NA
pH:	NA	**SOLUBILITY IN WATER:**	Miscible
APPEARANCE AND ODOR:	Clear colorless liquid with mild odor.		

SECTION 10 – STABILITY AND REACTIVITY:

STABILITY: **Stable:** X **Unstable:**

Conditions to Avoid: Contact with metals produces hydrogen gas, which can form flammable or explosive mixtures in air. Will generate heat when mixed with alkalis. Reaction with sulphides, phosphides, cyanides, acetylides, fluorides, silicates, and carbides, releases flammable and/or poisonous gases. May spatter upon contact with water.

INCOMPATIBILITY (Materials to Avoid): Strong oxidizers, strong acids, strong alkalis, sulphides, cyanides, fluorides, carbides, silicates and metals. Always test the compatibility of materials before mixing or storing together.

HAZARDOUS POLYMERIZATION: **May Occur:** **Will Not Occur:** X

Conditions to Avoid: None known.

DECOMPOSITION PRODUCTS: Acrolein, hydrogen gas, carbon dioxide and carbon monoxide.

SECTION 11 – HEALTH HAZARD DATA:

ROUTE(S) OF ENTRY: **Inhalation:** Yes **Skin/Eye Contact:** Yes **Skin Absorption:** No **Ingestion:** Unlikely

HEALTH HAZARDS (Acute and Chronic):

Acute (Short-Term) Effects:

Eye and skin contact: Corrosive. Can irritate and chemically burn the eyes, skin and mucous membranes. Symptoms of eye contact include pain, redness in the eyes, blurred vision and tissue damage. Symptoms of skin contact many include pain, redness and tissue damage.

Inhalation: Inhalation of significant quantities of mist or vapor may damage the respiratory tract Symptoms can include labored breathing, sore throat and coughing. Symptoms can be delayed.

Ingestion: Swallowing large amounts can irritate or burn the mouth, gastrointestinal tract and may be fatal. Symptoms may include pain, ulceration, nausea and vomiting.

Systemic Effects: Ingestion can cause kidney damage.

Chronic (Long-Term) Effects:

Repeated and prolonged inhalation of mist and vapors may cause impaired lung function including irritation of the nose, throat and respiratory tract.

Frequent or prolonged contact may irritate the skin, cause a skin rash (dermatitis), dry the skin and damage the eyes.

Reproductive or developmental effects: No ingredient is 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 effects. However, arsenic may be present in trace amounts.

CARCINOGENICITY: NTP: NO **IARC:** NO **OSHA REGULATED:** NO

* * This product does not contain any ingredient that is designated as a carcinogen by the National Toxicology Program (NTP) Annual Report on Carcinogens, by the International Agency for Research on Cancer (IARC) and by OSHA.

** This product does not contain or produce a chemical known to the State of California and other states, if applicable, to cause cancer.

SIGNS AND SYMPTOMS OF EXPOSURE:

Skin, eye and respiratory tract irritation or damage. Skin may redden with pain. Eyes will burn. Will irritate or burn the respiratory tract if inhaled. May irritate or burn the intestinal tract if ingested. Ingestion may damage kidneys.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Skin, eye and respiratory tract ailments.

SECTION 12 – ECOLOGICAL INFORMATION:

Toxicity: No further relevant information is available.

SECTION 13 – DISPOSAL:

WASTE DISPOSAL METHOD: Dispose of in accordance with local, state, and/or federal regulations. Consult an environmental expert for advice on disposal. In small quantities, this material is not classified as a hazardous waste and is not regulated under RCRA. Small amounts and cleanup debris can be disposed of as regular waste. (40 CFR 261.20-24)

SECTION 14 – TRANSPORTATION DATA:

DOT Proper Shipping Name:	Consumer commodity, ORM-D for quantity not exceeding one gallon.
UN Hazard Class:	8, Corrosive Liquid Acids
UN Number:	3264
DOT Label:	ORM-D

SECTION 15 – REGULATORY INFORMATION:

OSHA Hazard Communication Standard 29 CFR 1919.1000
OSHA PELs 29 CFR 1910.1000
EPA SARA Section 313 and40 CFR Part 372
EPA Waste Disposal Regulations
California Proposition 65

SECTION 16 – OTHER INFORMATION:

This Safety Data Sheet (SDS) was prepared to comply with the UN Globally Harmonized System of Classification and Labeling of Chemicals (GHS). The SDS also complies with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

The information contained within this SDS is based on data believed to be correct and reliable. All information appearing within this SDS is based upon data obtained from suppliers of the raw materials. While the information is believed to be accurate, Creative Craftsmen Co. Inc. makes no representation as to its accuracy of sufficiency. No guarantee or warranty is expressed or implied regarding the accuracy of this data and information contained herein. Creative Craftsmen Co. Inc. expressly disclaims all expressed or implied warranties for merchantability and fitness for a particular purpose, with respect to the product or information provided herein.

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