

SAFETY DATA SHEET

SECTION 1 – MANUFACTURER/PRODUCT IDENTIFICATION:

PRODUCT IDENTITY: **E Z 40 + SOLDER FLUX (CAT. # 50012 & 50013)**

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
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Trade Name: E Z 40 + Solder Flux **Product Type:** Solder Flux **Chemical Family:** Not Applicable

SECTION 2 – HAZARDS IDENTIFICATION:

SECTION 2.1: HAZARD CLASSIFICATION:

WARNING! THIS PRODUCT IS AN IRRITANT TO THE EYES, SKIN AND RESPIRATORY TRACT



Causes eye irritation
 Causes skin irritation
 Causes respiratory tract irritaion
 Causes gastrointestinal irritaion if ingested

PRECAUTIONARY INFORMATION:

CAUSES EYE IRRITATION. CAUSES SKIN IRRITATION. CAUSES RESPIRATORY TRACT IRRITATION. CAUSES STOMACH PAIN, IF SWALLOWED. CONTACT POISON CONTROL CENTER OR PHYSICIAN UPON EXPOSURE. Do not breathe dust/mist/fume/vapor or spray. Prevent material from becoming airborne. Avoid the generation and inhalation of dust and mist. Prevent eye contact and prolonged skin contact. Utilize appropriate protective clothing including eye and skin protection. Use 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. See additional information on the SDS for further details regarding the safe use of this product.

SECTION 2.2: LABEL INFORMATION:

PRODUCT IDENTITY: EZ 40+ SOLDER FLUX (CAT # 50012 & 50013)



Signal Word: WARNING
Hazardous Components: Ammonium Chloride
Hazard Statement: Will cause irritation upon contact with eyes, skin, and the respiratory system.

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 goggles and an appropriate respirator.

EMERGENCY INFORMATION:

Immediately call a Poison Control Center or a physician. Remove contaminated clothing and contacts, if worn.

Important Systemic Effects: Product is an irritant.

Inhalation: Move to fresh air. Support breathing as needed. If breathing is difficult, give oxygen. Do not use mouth-to-mouth if substance was inhaled or ingested. Immediate medical attention is required.

Eye Contact: Immediately rinse eyes with warm potable water. Remove contacts if worn. Rinse for 15 minutes including under eyelids. Immediate medical attention is required.

Skin Contact: Remove contaminated clothing. Immediately wash affected area with plenty of soap and water. Immediate medical attention is required.

Ingestion: Do not induce vomiting. Rinse mouth. Drink milk or water if conscious. Immediate medical attention is required. Call a physician or Poison Control Center.

Note to Physician: Inform medical personnel that victim was exposed to an ammonium chloride solution.



NFPA Fire Diamond	Fire (Red) = 0	Creative Craftsmen Co., Inc.
	Health (Blue) = 2	27625 Diehl Road
	Reactivity (Yellow) = 0	Warrenville, Illinois 60555-3838
	Special Hazard (White)	800-323-5668

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	SARA^b	OSHA PEL^c (mg/m³)^d	ACGIH TLV^e (mg/m³)	NOTES	PERCENT^f
Ammonium Chloride Fume	12125-02-9		---	10 (20 ^g)	STEL ^g	4.9
Sorbitol	50-70-4		5 15	3 10	Respirable Particulate Total Particulate	49.1
Water	7732-18-5		---	---	---	46.0

Notes:

- The term "Hazardous" is defined in the 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.
- An asterisk (*) indicates a toxic chemical subject to the EPA's reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (SARA) and 40 CFR Part 372.
- These permissible exposure limits (PELs) are based on OSHA's rulemaking (29 CFR 1910 Subpart Z) adopted on May 29, 1971, and are the current regulatory limits, unless otherwise noted. Consult the OSHA regulations for particulate (29 CFR 1910.1000) for additional requirements.
- These values are reported as milligrams of contaminant per cubic meter of air (mg/m³).
- These values are based on the American Conference of Governmental Industrial Hygienists (ACGIH) 2010 TLVs.
- Approximate percent by weight values. The amount of each ingredient in this product is confidential and deemed proprietary. Contact the manufacturer for additional information.
- STEL = Short-Term Exposure Limit = 20 mg/m³

SECTION 4 – FIRST AID PROCEDURES:

Inhalation:	Exit to fresh air. Support breathing as needed. If conditions persist, seek medical attention. Do not use mouth-to-mouth if substance was inhaled or ingested. Give artificial respiration with the aid of a pocket mask with one-way valve or other respiratory medical device. Immediate medical attention is required.
Eyes:	Check for and remove contact lenses. Hold eyelids apart and flush eyes with plenty of water 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. If redness or irritation develops, seek medical attention. Discard or decontaminate clothing before reuse.
Ingestion:	Immediately rinse mouth with plenty of water. If within 30 minutes of ingestion give a small glass of water. Do not give anything by mouth to an unconscious person. Do not induce vomiting. Seek medical attention if a large quantity of this material is swallowed or if necessary. Call a physician or Poison Control Center.
Note to Physician:	Inform that potential dust, mist and vapor exposure is of concern. Inform that product contains small amounts of ammonium chloride. Treat symptomatically and supportively.

SECTION 5 – FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT (Method Used):	NA	This product is nonflammable. It will not support combustion.		
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.			
SPECIAL FIRE FIGHTING PROCEDURES:	Wear appropriate protection for the surrounding fire. When fighting chemical fires wear self-contained breathing apparatus and full protective clothing. Do not release runoff to sewers and waterways. Use water spray to keep fire-exposed containers cool. Containers may explode in heat of fire.			
UNUSUAL FIRE AND EXPLOSION HAZARDS:	When subjected to heat and flames, toxic gases such as acrolein, ammonia, hydrogen chloride, carbon dioxide and carbon monoxide may be released. When water evaporates product may combust. Mechanical shock and static discharge increase risk of explosion.			
SPECIAL REMARKS ON EXPLOSION HAZARDS:	Explosive reaction between bromine trifluoride and ammonium halides.			

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. Prevent skin and eye contact. Do not breathe mist/fumes.

SMALL SPILLS: Contain small spills using appropriate personal protective equipment including acid-resistant gloves and clothing and appropriate respiratory protection. Dilute with water and mop up or absorb with an inert dry material. Use appropriate containment materials including neutralizers and sand or other non-combustible absorbents. Place absorbents into appropriate containers for disposal. Thoroughly clean area with soap and water. Rinse with plenty of water. Properly dispose of contaminated material.

LARGE SPILLS: If spill is uncontrolled contact spill response personnel. Stop the leak if without risk. Evacuate personnel to safe areas. Utilize appropriate personal protective equipment (See Section 8, Personal Protection in Case of Large Spill). Contain the spill using appropriate spill containment materials including absorbents such as kitty litter or spill kit materials and cloth towels. If the product is in liquid form: Absorb with an inert material and put the spilled material in an appropriate waste disposal. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Clean up using wet methods. Rinse clean floors thoroughly.

SPILL CLEANUP: During clean up of dried material avoid creating airborne dust and vapors (e.g., use wet methods or HEPA vacuum). 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 chemical protective clothing. Prevent the spread of the dry material and keep dust levels to a minimum. Wet the dried material, scoop up, vacuum or mop the material, and place it into closed containers for reuse or disposal. Once material is swept up, the area may be rinsed with water. Properly dispose of contaminated material.

Assure that the product is not present at an airborne concentration above the TLV/PEL. Make sure that no slip hazard exists once material has been cleaned up. Do not reuse empty containers for food, clothing or products for human consumption. Call for assistance on disposal. 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: 1000 lbs For Ammonium Chloride (CAS# 12125-02-9)

SECTION 7 – PRECAUTIONS FOR SAFE HANDLING AND USE:**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:**

Storage: When not in use, store in tightly closed containers in a dry, cool, well-ventilated area. Keep away from heat and sources of ignition. Ground all equipment that contains material. Store out of direct sunlight. Do not store with incompatible materials.

Handling: Handle with care. 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 contaminant exposures are above TLV/PEL. Avoid unnecessary eye and prolonged skin contact. Do not ingest. Wash thoroughly after handling. If material has dried out add water to maintain consistency. Keep floors clean and dry. Professionally wash contaminated clothing before reuse.

PRECAUTIONS TO BE USED DURING REPAIR AND MAINTENANCE: Not Applicable

OTHER PRECAUTIONS: Keep out of reach of children. Do not allow material to dry out. Keep work surfaces clean. Clean surfaces with wet sponge, rinsing frequently. Do not dry sweep. Ensure that an eyewash station and safety showers are near the work location. Empty containers may contain residue and are considered hazardous. Do not reuse empty containers other than for their intended purpose.

SECTION 8– CONTROL MEASURES/PERSONAL PROTECTION:**VENTILATION:**

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

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

Special: NA.

RESPIRATORY PROTECTION (Specify Type): Under normal conditions of use no respiratory protection is needed. Where exposure above the TLV/PEL is likely, utilize a NIOSH approved dust mask to protect from particulate, or a half-mask or full-facepiece air-purifying respirator (APR) equipped with filters approved for particulate and acid gases. APRs do not protect workers in oxygen deficient atmospheres. Comply with OSHA respirator regulation 29 CFR 1910.134.

SECTION 8– CONTROL MEASURES/PERSONAL PROTECTION (Cont.):

PROTECTIVE GLOVES: Use appropriate chemically resistant gloves (impervious).

EYE PROTECTION: Wear splash goggles, safety glasses with side shields or face shield. Cover goggles are recommended if product becomes airborne.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Wear appropriate impervious protective clothing to prevent skin exposure during normal conditions of use.

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

WORK/HYGIENIC PRACTICES: Avoid skin and eye contact. Avoid breathing dust and mist. 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. Use good personal and industrial hygiene practices.

PERSONAL PROTECTION IN CASE OF A LARGE SPILL:

Splash goggles. Full suit. Chemical resistant gloves and boots. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult an emergency response specialist BEFORE handling this product.

SECTION 9 – PHYSICAL/CHEMICAL CHARACTERISTICS:

BOILING POINT:	ND	VAPOR DENSITY (Air = 1)	NA
MELTING POINT:	ND	VAPOR PRESSURE (mm Hg):	NA
SPECIFIC GRAVITY:	1.05 (H ₂ O = 1)	EVAPORATION RATE	
Bulk Density:	8.76 lbs/gal (Water = 8.34)	(Butyl Acetate = 1):	NA
pH:	NA	SOLUBILITY IN WATER:	Soluble.
APPEARANCE AND ODOR:	Clear liquid. Slight odor.		

SECTION 10 – STABILITY AND REACTIVITY:

STABILITY:	Stable:	<u> </u> X <u> </u>	Unstable:	<u> </u>
Conditions to Avoid:	Avoid contact with incompatible materials, excess heat and ignition sources.			
INCOMPATIBILITY (Materials to Avoid):	Strong oxidizers, strong acids, strong alkalis and metals. Always test for compatibility before mixing or storing together.			
Corrosivity:	The ammonium chloride component is extremely corrosive in the presence of copper, brass and bronze. Corrosive in the presence of steel and stainless steel. Slightly corrosive in presence of aluminum.			
HAZARDOUS POLYMERIZATION:	May Occur:	<u> </u>	Will Not Occur:	<u> </u> X <u> </u>
Conditions to Avoid:	None known.			
DECOMPOSITION PRODUCTS:	None known under normal handling and storage conditions.			

SECTION 11 – HEALTH HAZARD DATA:

ROUTE(S) OF ENTRY:	Skin/Eye	Skin		
Inhalation:	<u> </u> Yes <u> </u>	Contact:	<u> </u> Yes <u> </u>	Absorption:
				<u> </u> Yes <u> </u>
				Ingestion:
				<u> </u> Unlikely <u> </u>

HEALTH HAZARDS (Acute and Chronic):**Acute (Short-Term) Effects:**

Inhalation: Dust, mist and vapor inhalation may be harmful to the respiratory system. Respiratory tract irritation possible from inhalation of dusts, mists and vapor. Causes eye irritation. May cause skin irritation. Exposure to airborne mist and particulate may cause headache and drowsiness. May be harmful (acidosis) if swallowed. May be a central nervous system hazard. Persons with preexisting conditions may be more susceptible.

Ingestion: Not likely. If ingested, may cause digestive tract irritation, nausea, diarrhea and central nervous system effects.

Eye and skin contact: Can be absorbed through the skin. Dust, mist and vapor exposure may cause irritation to eyes and mild irritation to skin.

Other health hazards: Ammonium chloride is a pulmonary sensitizer.

Chronic (Long-Term) Effects:

Repeated and prolonged inhalation of dust and mist may cause impaired lung function (asthma). Smoking aggravates the effects of excessive exposure. Prolonged or repeated skin contact may cause dermatitis. Repeated or prolonged exposure can produce target organ damage. May affect the kidneys.

SECTION 11 – HEALTH HAZARD DATA (Cont.):

Toxicological Data on Ingredients: Sorbitol: Oral (LD50): Acute: 15900 mg/kg [Rat]. 2320 mg/kg [Mouse]. IV (LD50): 7100 mg/kg [Rat]. Ammonium chloride: Oral (LD50): 1300mg/kg (mouse); (LDL) 2000mg/kg (Human Infant –Oral).
Special Remarks: Ammonium chloride may affect genetic material and passes through the placental barrier.

CARCINOGENICITY: **NTP:** No **IARC:** No **OSHA REGULATED:** No

* * This product does not contain an ingredient that is designated as a carcinogen by IARC, NTP, or OSHA.

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

SIGNS AND SYMPTOMS OF EXPOSURE: Skin, eye and respiratory tract irritation. May produce stinging redness, burning sensation, and tearing with no eye injury. May affect the central nervous system.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Individuals with a preexisting lung condition may have increased susceptibility to the toxicity of excessive exposure including people with upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema, and asthma.

SECTION 12 – ECOLOGICAL INFORMATION:

Environmental Toxicity: Toxic to aquatic life.

Do not empty containers into drains. Large amounts released will harm aquatic organisms.

SECTION 13 – DISPOSAL:

WASTE DISPOSAL METHOD: Dispose of in accordance with local, state, and/or federal regulations. 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.

CERCLA: Hazardous substances: Ammonium chloride: report spills greater than 5000 lbs (2268 kg).

SECTION 14 – TRANSPORTATION DATA:

DOT Proper Shipping Name: Not regulated by DOT

UN Hazard Class:

UN Number:

Packing Group:

DOT Label:

SECTION 15 – REGULATORY INFORMATION:

OSHA Hazard Communication Standard 29 CFR 1919.1000

OSHA PELs 29 CFR 1910.1000

EPA SARA Section 313 and 40 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 or 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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