



SAFETY DATA SHEET

Section 1: GENERAL INFORMATION

TRADE NAME (Common Name or Synonym)	CHEMICAL NAME	PREPARED BY
NC-820	Soldering Flux	Metallic Resources
USED IN INDUSTRIAL SOLDERING PROCESSES		
ADDRESS (No., Street, City, State, Zip Code): Metallic Resources, Inc., 2368 East Enterprise Parkway, Twinsburg, OH 44087		
CONTACT	PHONE NUMBER	
Metallic Resources, Inc.:	(330) 425-3155	
Chemtrec:	(800) 424-9300	
or contact any emergency room within 15 minutes of your location.		

Section 2: HAZARDS IDENTIFICATION

Signal word: Danger

Hazard statement(s)

- H317 May cause an allergic skin reaction
 H319 Causes serious eye irritation
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
 H335 May cause respiratory irritation



Precautionary statement(s)

- P233 Keep container tightly closed
 P261 Avoid breathing dust/fume/gas/mist/vapors/spray
 P270 Do not eat, drink or smoke when using this product
 P273 Avoid release to the environment
 P280 Wear protective gloves/protective clothing/eye protection/face protection
 P362 Take off contaminated clothing and wash before reuse
 P301 + P314 IF SWALLOWED: Get Medical advice/attention if you feel unwell
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water
 P304 + 341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
 P305 + 351 IF IN EYES: Rinse continuously with water for several minutes (15 mins)

POTENTIAL HEALTH EFFECTS:

- Eye Contact:** May cause serious eye irritation.
Ingestion: May cause irritation.
Inhalation: May cause irritation.
Skin Contact: May cause harm to the skin upon contact. May cause skin irritation.
Chronic: Not established.

NOTE: Metallic Resources does not recommend, manufacture, market or endorse any of its products for human consumption.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Material or Substance	C.A.S. #	Wt. %
Water	7732-18-5	95-99%
Carboxylic Acid	68937-69-9	1-2%

Section 4: FIRST AID MEASURES

- Eye Contact:** Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation persists.
- Ingestion:** If patient is conscious, ONLY induce vomiting as directed by trained personnel. NEVER give anything by mouth to an unconscious person. Seek medical attention immediately.
- Inhalation:** Remove to fresh air. If not breathing, give artificial respiration or oxygen by trained personnel. Seek immediate medical attention.
- Skin Contact:** Remove contaminated clothing. Wash affected area with soap and water. Wash clothing before reuse. If irritation persists, obtain medical attention.

Section 5: FIRE FIGHTING MEASURES

- Flash Point:** None **Method:** Not Applicable
- Auto-ignition Temperature:** None
- Flammable Limits:** Not established
- Extinguishing Media:** Use extinguishers appropriate for the surrounding fire conditions.
- Special Fire Fighting Procedures:** Standard fire fighting equipment

Section 6: ACCIDENTAL RELEASE MEASURES

- Spill or Leak Procedures:** Do not allow product to enter sewer system or waterway, unless approved to do so. Dispose of following all Federal, State and Local regulations. In the EU refer to the Special Waste Regulations.

Section 7: HANDLING AND STORAGE

- Handling Precautions:** Keep containers tightly closed when not in use. Use care to avoid spills. Wear personal protective equipment.
- Storage Precautions:** Store product in tightly capped original containers in a cool, dry area, well ventilated away from sources of ignition. Refer to product label for specific storage temperature requirements. Rotate stock to ensure use before expiration date on the label.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering Controls:** Face velocity >2.1 cubic feet/minute in confined areas. Exhaust ventilation is recommended to keep exposure limits as low as possible. Keep exposure as low as possible.
- Personal protection:**
- Eyes:** Chemical safety glasses/goggles. Face shield for splash hazards.
- Respirator:** A NIOSH approved or compliant marked air-purifying respirator with a fume/organic chemical cartridge is recommended where airborne concentrations are expected to be elevated.
- Skin:** Compatible chemical resistant gloves. Do not use latex gloves.
- Other:** Lab coat, sleeve protectors, eyewash fountain in work area. Avoid the use of contact lenses in high fume areas.
- Work/Hygienic Practices:** Maintain good housekeeping. Clean up spills immediately. Good personal hygiene is essential. Avoid eating, smoking or drinking in the work area. Wash hands thoroughly with soap and water immediately upon leaving the work area.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

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|---|--------------------------------------|
| Appearance: liquid, clear | Boiling Point: 221°F (105°C) |
| Odor: Mild characteristic odor | Melting Point: Not applicable |
| Specific Gravity: 1.010+/-0.01 | pH: 3.5 |
| Vapor Pressure: 218 mmHg at 173°F (78°C) | Solubility in Water: Soluble |
| Vapor Density: (air=1) Not Applicable | |

Section 10: STABILITY AND REACTIVITY

General: Stable.

Conditions to Avoid: Direct heat, open flames and storage in aluminum.

Incompatible Materials: Strong alkali

Hazardous Decomposition / Combustion: Carbon dioxide/carbon monoxide.

Hazardous Polymerization: Will not occur

Section 11: TOXICOLOGICAL INFORMATION

Carcinogenicity: NTP: No OSHA: No IARC: No

LD50: Not established. **LC50:** Not established.

Section 12: ECOLOGICAL INFORMATION

No Data Available

Section 13: DISPOSAL CONSIDERATION

Waste Disposal Method: Dispose of in accordance with all Federal, State and Local environmental regulations. In Europe follow the Special Waste Regulations.

Section 14: TRANSPORT INFORMATION

Transport in accordance with applicable regulations and requirements. Not regulated under US DOT (United States Department of Transportation).

Non hazardous

UN - none

Section 15: REGULATORY INFORMATION**UNITED STATES**

CERCLA: Not subject to any special reporting under the requirements of CERCLA.

TSCA Status: All ingredients are listed or are exempt from listing (as polymers) under TSCA.

CANADA

WHMIS (Canada): Class B Division 2, Class D Division 2B

California Proposition 65: When used for soldering and similar applications, the chemicals may be products which are known to some states to cause birth defects or other reproductive harm.

Reach Directive 1907/2006: This product does not contain any Substances of Very High Concern (SVHC).

Section 16: OTHER INFORMATION**ABBREVIATION TERMS:**

ACGIH	American Conference of Government Industrial Hygienists	OSHA	Occupational Safety and Health Act
CAS	Chemical Abstracts Service	PEL	Permissible Exposure Limit
CEPA	Canadian Environmental Protection Act	REL	Recommended Exposure Limit
IARC	International Agency for Research on Cancer	SARA	Superfund Amendments & Reauthorization Act
NIOSH	National Institute for Occupational Safety and Health	TSCA	Toxic Substances Control Act
NTP	National Toxicology Program	N/A	Not Applicable, Not Available

Issue Date: 5/1/15

Revised Date: 5/1/15

Disclaimer Notice: The information contained herein in this Safety Data Sheet is believed to be accurate. However, it provides no warranties, either express or implied, and assumes no responsibility for the accuracy or completeness of the data contained herein. The customer/user of this product assumes all liability and risk in the use of this product.