



## Safety Data Sheet

SDS ID: Stock Code FT

Revision date: April 27, 2017

### Section 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product name:** Flux-Tyte Solder Flux Paste  
**Synonyms:** None  
**Chemical family:** N/A  
**Producer:** J.C. Whitlam Manufacturing Company  
200 West Walnut Street  
P.O. Box 380  
Wadsworth, Ohio 44282-0380  
[www.jcwhitlam.com](http://www.jcwhitlam.com)

**Telephone:** 330-334-2524 Available during normal business hours

**Emergency:** 330-334-2524 Available during normal business hours

### Section 2. HAZARDS IDENTIFICATION

**Health Hazards:** Skin corrosion/irritation, Category 1B  
Serious eye damage/eye irritation, Category 1

**Hazard Statement:**  
Causes severe skin burns and eye damage.



**Danger**

#### Precautionary Statements

**Inhalation:** Do not breathe dusts or mists. Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor.

**Ingestion:** Rinse mouth. Do not induce vomiting.

**Skin Contact:** Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

**Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### Section 3. COMPOSITION / INFORMATION ON INGREDIENTS

#### Material information:

Name	CAS No.	Weight %
Petrolatum	8009-03-8	60 - 100
Zinc chloride	7646-85-7	15 - 40
Ammonium chloride	12125-02-9	1 - 5

**\*Note:** The above weight percentages are represented in ranges as estimates. Due to variation among production batches, component percentages may vary.

## Section 4. FIRST AID MEASURES

- Inhalation:** If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
- Skin contact:** Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
- Ingestion:** Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs
- Eye contact:** Immediately flush eyes with plenty of water for at least 15 minutes. Continue rinsing. Call a physician or poison control center immediately. Remove contact lenses, if present and easy to do.

### Symptoms/effects:

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

### Immediate medical attention/action:

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

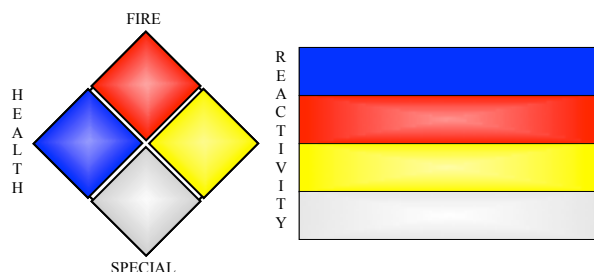
## Section 5. FIREFIGHTING MEASURES

**Suitable extinguishing media:** Dry chemical, alcohol foam, carbon dioxide. Do not use water jet, as this may spread burning material.

**Specific hazards:** Product will float and can be re-ignited at the water's surface. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

**Special fire-fighting procedures:** Firefighters should wear proper full protective equipment and self-contained breathing apparatus. Move containers from fire area if it can be done without risk. Water spray may be ineffective. Water spray may only be useful in cooling equipment and containers exposed to heat and flame.

	NFPA rating:	HMIS rating:
<b>Health:</b>	<b>3</b>	<b>3</b>
<b>Flammability:</b>	<b>1</b>	<b>1</b>
<b>Instability/reactivity:</b>	<b>1</b>	<b>1</b>
<b>Other:</b>	<b>N/A</b>	<b>N/A</b>



## Section 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions:</b>	Clean-up personnel should wear appropriate chemically protective equipment and respiratory protection.
<b>Large Spill:</b>	For large product users or spills involving large quantities, it is recommended that the purchaser establish a spill prevention, control and countermeasure plan. This plan should include procedures for proper storage, as well as clean-up of spills or leaks. The procedure should conform to safe practices and provide for proper recovery and/or disposal.
<b>Methods for Containment and Clean up</b>	Eliminate all sources of heat and flame. Ventilate area of release. If material is in paste form, scrape up into suitable containers. If material is in dust form, clean up using dustless methods (for example, HEPA vacuum). Do not use compressed air. Place any recovered material in closed, labelled containers for recycling or disposal (see below). Keep out of waterways. Notify the appropriate authorities as required.

## Section 7. HANDLING AND STORAGE

<b>Handling:</b>	Wear appropriate chemically protective equipment. Use in a well ventilated area. Avoid inhalation and ingestion of product, and activities that generate dust or fume. Avoid contact with skin, eyes, and clothing. Keep melting temperatures as low as possible to minimize the generation of fumes. NOTE: Inadvertent contaminants to product, such as moisture, ice, snow, grease or oil can cause an explosion when charged to a molten metal bath or melting furnace. (Preheating metal will remove moisture from product). Keep away from oxidizing materials and incompatibles. Use caution when opening cap. Keep container closed when not in use. Wash thoroughly after handling.
<b>Storage:</b>	Store in a cool, dry, well-ventilated area away from incompatible material, heat and flame. Practice good housekeeping procedures to prevent accumulation of dust or refuse. Keep material dry.

## Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Occupational Exposure Limits:

Name	CAS No.	ACGIH® TLV® Exposure Limits:	Federal OSHA PELs	OSHA PELs 1989 C
Zinc chloride	7646-85-7	1 mg/m <sup>3</sup> (fume) (TWA) 2 mg/m <sup>3</sup> (fume) (STEL)	1 mg/m <sup>3</sup> (fume)	N/A
Ammonium chloride	12125-02-9	10 mg/m <sup>3</sup> (fume) (TWA)	10 mg/m <sup>3</sup> (fume) (TWA) (final rule/vacated value)	N/A

**Engineering measures:** An eyewash station and safety shower should be made available in the immediate working area. Other equipment, including chemically resistant apron, may be required according to workplace standards.

## PERSONAL PROTECTIVE EQUIPMENT

- Respiratory protection:** For prolonged exposure or if the TLV is exceeded, wear NIOSH-approved respirators. Use in well ventilated area. Use general ventilation for prolonged exposures or if the TLV is not known.
- Skin and body protection:** Gloves impervious to the material must be worn. Advice should be sought from glove suppliers.
- Eye protection:** Safety goggles, to prevent product from entering the eyes. Safety glasses or goggles AND a full face shield are recommended around molten metal.
- Hygiene measures:** Avoid inhalation of vapors, fumes and dusts. Avoid contact with eyes, skin and clothing. Do not permit eating, drinking or the use of cosmetics or tobacco products while handling or processing material, or in product work areas. Practice good personal hygiene procedures. Wash hands and face thoroughly before eating, drinking, applying cosmetics or using tobacco products. Remove soiled clothing and wash it thoroughly before reuse.

## Section 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Light brownish to white paste
<b>Physical state (solid/liquid/gas):</b>	Paste
<b>Substance type (pure/mixture):</b>	Mixture
<b>Color:</b>	Brownish to white
<b>Odor:</b>	Slight petroleum
<b>Molecular weight:</b>	Not Available
<b>pH:</b>	Not Available
<b>Boiling point/range (5-95%):</b>	Not Available
<b>Melting point/range:</b>	95°F (35°C)
<b>Decomposition temperature:</b>	Not Available
<b>Specific gravity:</b>	0.87 @ 60°F (15.6°C)
<b>Vapor density:</b>	Not Available
<b>Vapor pressure:</b>	Not Available
<b>Evaporation rate (Butyl acetate= 1):</b>	Not Available
<b>Flash point, method used:</b>	360°-430°F (182°C-221°C) (TCC)
<b>Water solubility:</b>	Insoluble
<b>VOC Content:</b>	11.7 g/l, <1%
<b>Auto-ignition temperature:</b>	No data
<b>Flammable limits in air — lower (%):</b>	No data
<b>Flammable limits in air — upper (%):</b>	No data

## Section 10. STABILITY AND REACTIVITY

- Reactivity:** Stable under ambient pressure and temperature.
- Stability:** Stable under the recommended storage and handling conditions prescribed. May be corrosive to metals such as copper and its alloys (e.g. brass, bronze), aluminum, ferrous metals (e.g. cast iron), carbon steel and some stainless steels (e.g. 303, 310, 321, 400 series).

**Possibly hazardous reactions:** Contact with acids may evolve hydrogen chloride gas.  
Contact with strong alkalis may evolve ammonia gas.

**Conditions to avoid:** Avoid extreme heat and direct flame. Contact with incompatible materials.

**Incompatible Materials:** Strong oxidizers (e.g. chlorine, peroxides, etc.), strong acids, strong alkalis, potassium, turpentine, cyanide, sulfides, powdered zinc, halogenated compounds, lead and silver salts.

**Hazardous decomposition products:** Ammonia.

**Polymerization:** Will not occur.

## Section 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:** No data available.

### Product information:

Name	CAS No.	Inhalation:	Oral:	Dermal:
Petrolatum	8009-03-8	LD <sub>50</sub> (Rabbit) N/A	LD <sub>50</sub> (Rabbit) N/A	LD <sub>50</sub> (Rabbit) 3,600 mg/kg
Zinc chloride	7646-85-7	LD <sub>50</sub> (Rabbit) N/A	LD <sub>50</sub> (Rabbit) 350 mg/kg	LD <sub>50</sub> (Rabbit) N/A
Ammonium chloride	12125-02-9	LD <sub>50</sub> (Rabbit) N/A	LD <sub>50</sub> (Rabbit) 1,650 mg/kg	LD <sub>50</sub> (Rabbit) N/A

LC<sub>50</sub> - The concentration of the chemical in air that kills 50% of the test animals in a given time (usually four hours).

**Chronic toxicity:** Prolonged or repeated skin contact may cause severe drying and cracking of the skin (dermatitis).

**Sensitization:** None known

## Section 12. ECOLOGICAL INFORMATION

**Ecotoxicity effects:** No data available

**Persistence:** No data available

**Degradability:** No data available

## Section 13. DISPOSAL CONSIDERATIONS

**Cleanup considerations:** Review federal, state and local government requirements prior to disposal. May have value on a recycled basis. Dispose in accordance with all applicable government regulations.

## Section 14. TRANSPORT INFORMATION

**Proper Shipping Name:** CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Zinc chloride)

**UN No:** UN3260

**Primary Class(es):** 8

**Subsidiary Class(es):** None

**Packing Group:** III

**Other Shipping Information:** Within Canada, the 'Limited Quantity Exemption' may apply for containers which hold 5 Kilograms or less of the product. Under the TDGR, refer to Section 1.17 for additional 'Limited Quantity Exemption' requirements, if shipping under this exemption.

## Section 15. REGULATORY INFORMATION

**U.S. federal regulatory information:**

**No information available**

***NOTE:** User must consult with applicable state and local agencies for special specifics, determinations or compliance obligations regarding this product.*

## Section 16. OTHER INFORMATION

The information and recommendations contained herein are based upon tests, data, and information resources believed to be reliable. However, the J.C. Whitlam Manufacturing Company, Inc., and its related operations or divisions (Whitlam) do not guarantee the accuracy or completeness, nor shall any of this information constitute a warranty, whether expressed or implied, as to the safety of goods, the merchantability of the goods or the fitness of the goods for a particular purpose. Adjustment to conform to actual conditions of usage may be required. Whitlam assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of this data. No warranty against infringement of any patent, copyright or trademark is made or implied.