# SAFETY DATA SHEET

DATE REVISED: January 1, 2018

## **SECTION 1 -- IDENTIFICATION**

Product Name/Part number: Water Soluble Liquid Flux

Recommended use: Soft Soldering Flux

Forney SKUs: 38120, 60301

Manufacturer:Forney Industries, Inc.2057 Vermont DriveFort Collins, CO80525

Mfg. Phone No. 800-851-6038

**Emergency Phone No.:** 1-800-535-5053

#### SECTION 2 – HAZARD(S) IDENTIFICATION

#### Classification of the substance or mixture

GHS Classification in accordance with OSHA HCS (29 CFR 1910)

Acute toxicity, Oral (Category 4)H302Skin corrosion (Category 1B)H314Serious eye damage (Category 1)H318Acute aquatic toxicity (Category 1)H400Chronic aquatic toxicity (Category 1)H410

See below for full text of H-Statement

#### **GHS Label Elements, including precautionary statements Pictogram(s):**



#### Signal Word: Danger

#### Hazard Statement(s)

Huzui a State	ment(b)	
H302	Harmful if swallowed	
H318	Causes serious eye damage	
**H314	Causes severe skin burns and eye damage	
**H400	Very toxic to aquatic life	
H410	Very toxic to aquatic life with long lasting effects	
**May be omitted from label due to presence of stronger statement.		

#### **Precautionary statement(s)**

P260	Do not breath mist, fumes, or vapors	
P264	Wash skin thoroughly after handling	
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	
P301+P312+P	330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.	
	Rinse mouth	
P301+P330+P	331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting	
P303+P361+P	353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.	
	Rinse skin with water/shower.	
P304+P340+P	310 IF INHALED: Remove person to fresh air and keep comfortable for	
	breathing. Immediately call a POISON CENTER/doctor	

P305+P351+I	P338+P310 IF IN EYES: Rinse cautiously with water for several minutes.	
Remove contact lenses, if present and easy to do. Continue rinsing.		
Immediately call POISON CENTER/doctor		
P363	Wash contaminated clothing before reuse.	
P391	Collect spillage	
P405	Store locked up	
P501	Dispose of contents and/or container to an approved waste disposal plant	
Hazards not otherwise classified or not covered by GHS: None		

SECTION 3 – COMPOSITION INFORMATION				
Components	CAS Number	%		
Zinc Chloride	7646-85-7	30-45		

# **SECTION 4 – FIRST AID MEASURES**

Description of first aid measures

- **General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
- **Inhalation:** If breathed in, move to fresh air. If not breathing, give artificial respiration. Consult a physician.
- **Eyes:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.
- Skin: Wash off with soap and plenty of water. Consult a physician.
- **Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most Important Symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in section 2 (labeling)

# **SECTION 5 – FIREFIGHTING MEASURES**

Flash Point: NA

Flammable Limits: NA

**Extinguishing Media:** Dry chemical, CO<sub>2</sub> foam

Auto Ignition Temperature: None

Special Fire Fighting Procedures: Normal cautions when dealing with chemicals.

Unusual Fire and Explosion Hazards: Will release small amounts of HCl upon decomposition

# SECTION 6 - ACCIDENTAL RELEASE MEASURES

- **Personal Precautions and Equipment and emergency procedures:** Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. *See section 8 for personal protection.*
- **Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**In Case Material is spilled:** First neutralize with soda ash or sodium bicarbonate, dilute with water and dispose of in accordance with EPA regulations.

# **SECTION 7 - HANDLING AND STORAGE**

Precautions for safe handling: Avoid contact with skin and eyes.

For full precaution statements see Section 2

**Storage Requirements:** Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

# SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION CONTROL PARAMETERS

**OSHA Permissible Exposure Limit (PEL):** 2.5 mg/m<sup>3</sup>

ACGIH Threshold Limit Value (TLV): 2.5 mg/m<sup>3</sup>

**Engineering Controls:** Use local exhaust ventilation to maintain air concentrations of vapors and fumes below occupational exposure standards.

**Special Engineering Control Needs:** NA

- **Respiratory Protection:** Where risk assessment shows air-purifying respirators are appropriate, use a full-face respirator with multi-purpose combination (USA) or ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested an approved under appropriate government standards such as NIOSH (USA) or CEN (EU).
- **Protective Gloves:** Handle with gloves. (Nitrile Rubber recommended) Gloves must be inspected prior to use. Use proper glove removal techniques (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good lab practices. Wash and dry hands after handling.
- **Eye Protection:** Use tightly fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (USA) or EN 166 (EU)
- **Body Protection:** Complete suit protecting against chemical, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

#### **SECTION 9 - PHYSICAL AND CHEMICAL CHARACTERISTICS**

Appearance	Red liquid
Odor	None
Odor threshold	No data available
рН	4.00-5.00 @ 20-25°C
Melting point/Freezing point	<-1°C / 30°F
Initial boiling point and boiling range	107°C / 225°F
Flash point	No data available
<b>Evaporation rate (Butyl Acetate = 1)</b>	< 1
Flammability (Solid, gas)	No data available
Upper flammability or explosive limits	No data available
Lower flammability or explosive limits	No data available
Vapor pressure	No data available °C / 68°F
Vapor density	<18 mmHg @ 20°C
Relative density	1.320 (Water = 1)
Solubility(ies)	Soluble in water
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

# **SECTION 10 - STABILITY AND REACTIVITY**

Reactivity: No data available Stability: Product is stable under recommended storage conditions Possibility of hazardous reactions: No data available Conditions to Avoid: Metals Incompatibility: Alkaline, strong oxidizers or reducers, cyanides or combustible materials Hazardous Decomposition Products HCl, zinc chloride, zinc oxide In the event of fire: See Section 5

## **SECTION 11 - TOXICOLOGICAL INFORMATION**

Likely Route(s) of Exposure: Inhalation, ingestion, skin and eye contact
Symptoms (Immediate and Chronic) from
Acute Exposure
No data available
Prolonged or Repeated Exposure
No data available
Measure(s) of toxicity
No data available
Is this chemical listed in the National Toxicology Program (NTP) Report on Carcinogens?
No data available
Is this chemical found to be a potential carcinogen in the International Agency for
Pescargh on Cancer (IAPC) Menographs or by the Occupational Safety and Healt

Research on Cancer (IARC) Monographs or by the Occupational Safety and Health Administration (OSHA) No data available

## **SECTION 12 - ECOLOGICAL INFORMATION**

Toxicity

 No data available

 Persistence and degradability

 No data available

 Bioaccumulative potential
 No data available

 Mobility in soil
 No data available

 Other adverse effects
 Hazard to ozone layer: No data available

# **SECTION 13 - DISPOSAL CONSIDERATIONS**

Waste treatment methods

ProductContact a licensed professional waste disposal service to dispose of this material.Contaminated packagingDispose of as unused product.

# **SECTION 14- TRANSPORTATION**

D.O.T. (USA)Proper Shipping Name: Zinc Chloride Solution (Contains Zinc Chloride)Identification Number: UN1840Hazard Class(es): 8Packing Group: IIIMarine Pollutant? Yes

<u>Ground USA: (1-gallon and smaller)</u> Classified as **ORM-D.** Refer to USA CFR 49 Regulations. **Recommended Shipper be trained and certified.** 

Ground Canada: (1-gallon and smaller)

Classified as **Consumer Commodity**.

**Refer to TDG regulations** (Canadian Transportation of Dangerous Goods regulations). **Recommended Shipper be trained and certified.** 

# **SECTION 15 - REGULATORY INFORMATION**

SARA 302 Components	No Chemicals in this material are subject to the reporting	
	requirement of SARA Title III, Section 302.	
SARA 313 Components	This material does not contain any chemical components with	
	known CAS numbers that exceed the threshold (De Minimis)	
	reporting levels established by SARA Title III, Section 313.	
SARA 302 Components	Fire Hazard, Acute Health Hazard, Chronic Health Hazard	

#### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

# THIS PRODUCT IS ROHS 2 COMPLIANT

# **SECTION 16 - OTHER INFORMATION**

#### **Further information:**

Judgments as to the suitability of information herein or the purchaser's purposes are necessarily the purchaser's responsibility. The above information does not represent any guarantee of the properties of the product. It is believed to be correct, but does not purport to be all inclusive and should be used only as a guide. Reasonable care has been taken in the preparation of this material, and is based on the present state of our knowledge.

Forney Industries, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.