JOHNSON MANUFACTURING COMPANY
Safety Data Sheet
To comply with 29CFR 1910.1200
OSHA's Hazard Communication Standard

50/50 Flux & Solder, 10-00

1. PRODUCT AND COMPANY INFORMATION

Johnson Manufacturing Company
114 Lost Grove Road
Princeton IA 52768
Emergency Telephone 1-(563)-289-5123
CHEMTREC AFTER HOURS 1-(800)-424-9300
Revised 1/1/2018 by JMC Product Safety

2. HAZARD IDENTIFICATION

GHS Classification:
Acute Tox. 4 *
Skin Corr. 1B
Aquatic Acute 1
Aquatic Chronic 1
Eye Irrit. 2
Chronic tox 2
Repro tox 2
Carcino 2

GHS Label Elements:
ZINC AMMONIUM CHLORIDE & LEAD
DANGER

H Codes: H302, H351, H361, H373, H410
Harmful if swallowed
Harmful if inhaled
Causes severe skin burns and eye damage
May be corrosive to metals
Suspected of causing cancer
Suspected of damaging fertility or the unborn child
May cause damage to organs through prolonged or repeated exposure
Very toxic to aquatic life with long lasting effects

P Codes:
Do not breathe dust/mist/vapors/fumes. Do not get in eyes, on skin, or on clothing. Use in a well ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation use respiratory protection. Do not eat, drink or smoke when using this product. IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Immediately call a POISON CENTER/Doctor. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical advice/attention if you feel unwell. IF INHALED: Remove victim to to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell. 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. Wash thoroughly after use. Wash contaminated clothing before reuse. Store in a closed corrosive resistant container, with corrosive resistant liner, in cool dry place. Avoid release to the environment. Dispose of contents/container in accordance with specified local/regional/national/international regulations for disposal. Keep out of the reach of children. Read label and SDS prior to use.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Component</th>
<th>CAS #</th>
<th>OSHA TWA</th>
<th>ACIGH TWA</th>
<th>Other limits</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tin</td>
<td>7440-31-5</td>
<td>2mg/M3</td>
<td>2mg/M3</td>
<td>NE</td>
<td></td>
</tr>
<tr>
<td>+ Lead</td>
<td>7439-92-1</td>
<td>0.05mg/M3</td>
<td>0.05mg/M3</td>
<td>NE</td>
<td>40%</td>
</tr>
<tr>
<td>+ Zinc Chloride</td>
<td>7645-52-7</td>
<td>1mg/M3</td>
<td>1mg/M3</td>
<td>NE</td>
<td></td>
</tr>
<tr>
<td>Ammonium Chloride</td>
<td>12125-02-9</td>
<td>10mg/M3</td>
<td>10mg/M3</td>
<td>NE</td>
<td></td>
</tr>
<tr>
<td>As Zinc Ammonium Chloride</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Only those ingredients listed in this section have been determined to be hazardous as defined in 29CFR 1910.1200. An ingredient marked with an asterisk(*) is also listed in 29CFR 1910.1200(D) #4 as a known or suspected cancer hazard.

+ denotes a chemical regulated as toxic by the Environmental Protection Agency (EPA) as outlined in 40CFR Part 372 (section 313)

4. FIRST AID MEASURES

Signs and symptoms of exposure: Inhalation: Nose & throat irritation, headache, dizziness, difficulty breathing, coughing. Ingestion: Nausea, vomiting, cramps. Skin: reddness, burning, rash, dryness. Eye: redness, burning, tearing, blurred vision.

Medical conditions aggravated by exposure: Skin, kidney and respiratory conditions.

Emergency first aid procedures:

Skin: Flush with water immediately - Seek medical attention if necessary
Eyes: Flush with water for 15 minutes - Seek medical attention
Ingestion: DO NOT induce vomiting, drink large amounts of water - seek medical attention.
Never give anything by mouth to an unconscious person
Inhalation: Remove to fresh air. Support respiration if required - Seek medical attention

5. FIREFIGHTING MEASURES

Extinguishing media: dry chemical.
Special fire fighting procedures: use self sustaining respiratory suit.
Unusual Fire and Explosion Hazards: May release hydrochloric acid, zinc chloride, zinc oxide, lead, tin, ammonia fumes.

6. ACCIDENTAL RELEASE MEASURES
Methods and materials: Flush into chemical sewer or soak up with a suitable absorbent. Wear adequate protection as described in section 8. Environmental Precautions: Avoid release to the environment. Collect spillage.

7. HANDLING & STORAGE

Wash thoroughly after use. Wash contaminated clothing before reuse. Store in a closed corrosive resistant container, with corrosive resistant liner, in cool dry place. Keep out of the reach of children. Read label and SDS prior to use.

8. EXPOSURE CONTROLS/PERSOINAL PROTECTION


9. PHYSICAL AND CHEMICAL PROPERTIES


10. STABILITY AND REACTIVITY

Stability: STABLE. Conditions to avoid: none.


11. TOXICOLOGICAL INFORMATION


Health Hazards (acute and chronic): Contact with material & fumes may cause skin, eye & respiratory irritation or burns. Inhalation &/or ingestion of material or fumes may result in flu like symptoms, insomnia, muscle weakness, digestive tract irritation or burns. Gross inhalation or ingestion may be toxic and can result in death. Symptoms of toxicity may take hours/days to manifest. Chronic exposures, inhalation or ingestion, may result in liver, kidney, red blood cell, reproductive & nervous system effects. Health effects may be cumulative over many exposures. May be mutagenic in lab animals. May cause sensitization. Studies show that health risks vary by individual. Minimize exposure as a precaution. See OSHA 29 CFR 1910.1025(subpartZ).

Carcinogenicity: not determined. NPT? no IARC Monographs? Lead suspect.

12. ECOLOGICAL INFORMATION


13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: dispose of in accordance with all local state and federal regulations. Other Precautions: Avoid skin & eye contact, inhalation & ingestion of fumes and material. Wash contaminated clothing before reuse. Keep away from children.

14. TRANSPORT INFORMATION

DOT Classification: Non-Hazardous. Marine Pollutant: NE.

15. REGULATORY INFORMATION

NFPA Classification (NFPA 325M 8th edition)(Health, Flammability, Reactivity): 2-1-0. This product can expose you to chemicals including lead, which is known to the state of California to cause cancer and/or birth defects or reproductive harm. For more information go to www.P65Warnings.ca.gov.

16. OTHER INFORMATION

The information and recommendations contained within this publication have been compiled from sources believed to be reliable and to represent the best information available to JOHNSON MANUFACTURING at the time of issue. No warranty, guarantee, or representation is made by JOHNSON MANUFACTURING nor does JOHNSON MANUFACTURING assume any responsibility for their accuracy or completeness. JOHNSON MANUFACTURING assume any responsibility for their accuracy or completeness.

NE = not established. NA = not applicable.

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