

# JOHNSON MANUFACTURING COMPANY

## Safety Data Sheet

To comply with 29CFR 1910.1200  
OSHA's Hazard Communication Standard

### FloRite #89 Flux

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#### 1. PRODUCT AND COMPANY INFORMATION

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Johnson Manufacturing Company  
114 Lost Grove Road  
Princeton IA 52768

Emergency Telephone 1-(563)-289-5123  
CHEMTREC AFTER HOURS 1-(800)-424-9300  
Revised 1/1/2021 by JMC Product Safety

#### 2. HAZARD IDENTIFICATION

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##### GHS Classification:

Acute Tox. 3



##### GHS Label Elements:

**POTASSIUM FLUORIDE & BORIC ACID**  
**DANGER**

**H Codes:** H301, H303, H311, H331, H360

Toxic if swallowed

Toxic if inhaled

May damage fertility or the unborn child

##### **P Codes:**

P264, 270, 201, 202, 281, 308+313, 280, 301+312, 330, 501, 271, 311, 503+233, 302, 352, 308+313, 363, 304+340, 321, 405,

Do not breath dust/mist/vapors/fumes/spray. 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. Wash with soap & water. If skin irritation occurs, get medical advise/attention. IF INHALED: Remove victim to to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/Doctor. 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. Do not eat, drink or smoke when using this product. Wash thoroughly after use. Wash contaminated clothing before reuse. Store in a closed compatible container 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. Do not handle until all safety precautions have been read and understood. Read label and SDS prior to use.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

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| Hazardous Component  | CAS #      | OSHA TWA    | ACIGH TWA   | Other limits | % |
|----------------------|------------|-------------|-------------|--------------|---|
| potassium fluoride   | 7789-23-3  | 2.5mg/M3(F) | 2.5mg/M3(F) | NE           |   |
| potassium bifluoride | 7789-29-9  | 2.5mg/M3(F) | 2.5mg/M3(F) | NE           |   |
| boric acid           | 10044-35-3 | NE          | NE          | NE           |   |

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

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**Signs and symptoms of exposure:**Inhalation-Nose & throat irritation, headache, dizziness, difficulty breathing, coughing. Ingestion-nausea, vomiting, cramps. Skin-redness, 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

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**Extinguishing media:** dry chemical.

**Special fire fighting procedures:** use self sustaining respiratory suit.

**Unusual Fire and Explosion Hazards:** May release hydrofluoric acid, fluorine, hydrocarbon fumes.

## 6. ACCIDENTAL RELEASE MEASURES

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**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

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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/PERSONAL PROTECTION

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**Occupational Exposure Limit Values:** See section 3.

**Respiratory Protection (type):** Acid mask required for fumes above TWA.

**Ventilation:** Local Exhaust preferred Special: NE

**Mechanical:** OK Other: NE

**Protective Gloves:** plastic or rubber **Eye Protection:** Goggles or face shield

**Other Protective Clothing or Equipment:** as required to avoid contact.

**Work/Hygienic Practices:** Wash after use. Follow good industrial hygienic practices.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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**Boiling Point:** 225 C

**Specific Gravity:** 2.0

**Vapor Pressure (mm Hg):** NE

**Melting Point:** NE

**Vapor Density:** NE

**Evaporation Rate:** <1 (butyl acetate=1)

**Solubility in water:** near 100%

**pH:** NE

**Flash Point:** NE (TOC)

**Flammable Limits:** lel: NE uel: NE

**Appearance and odor:** White to tan paste, odorless.

## 10. STABILITY AND REACTIVITY

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**Stability :** STABLE **Conditions to avoid :** none

**Incompatibility (materials to avoid):** strong bases & acids, oxidizers, sulfides, halogens.

**Hazardous Decomposition or Byproducts (incomplete combustion):** Hydrofluoric acid, fluorine, and hydrocarbons.

**Hazardous Polymerization:** WILL NOT OCCUR **Conditions to avoid:** none

## 11. TOXICOLOGICAL INFORMATION

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**Routes of entry:** Inhalation: yes Skin: yes Ingestion: yes

**Health Hazards (acute and chronic):** Contact with material and fumes may cause skin, eye and respiratory tract irritation. Gross inhalation may cause asthma. Ingestion may cause digestive tract irritation. Material is toxic by ingestion. Gross inhalation or ingestion may result in death. Material may be absorbed through skin. Repeated skin contact may result in absorption of harmful amounts. Chronic ingestion and inhalation exposures may result in embrittlement of bones, mottling of teeth, stiffening of ligaments and tendons (fluorosis), kidney and respiratory tract effects. May be mutagenic in lab animals. Studies show that potential health risks vary by individual. Minimize exposure as a precaution.

**Carcinogenicity:** not determined NPT? no IARC Monographs? no

## 12. ECOLOGICAL INFORMATION

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**Toxicity:** NE  
**Bio-accumulative Potential:** NE  
**PBT & vPvB Assessment:** NE

**Persistence & Degradability:** NE  
**Mobility in Soil:** NE  
**Other Adverse Effects:** NE

## 13. DISPOSAL CONSIDERATIONS

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**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

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**DOT Classification:** Non-Hazardous

**Marine Pollutant:** NE

## 15. REGULATORY INFORMATION

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NFPA Classification (NFPA 325M, 8<sup>th</sup> edition)(Health, Flammability, Reactivity): 2-0-0  
This product contains components known to the state of California to cause cancer or reproductive harm.

## 16. OTHER INFORMATION

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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 in connection there within; nor can it be assumed that all acceptable safety measures or other safety measures may not be required under particular or exceptional conditions or circumstances.

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NE = not established NA = not applicable

Form 303.484 Rev.D