

## SAFETY DATA SHEET (SDS)

Revised: July 2018

**SECTION 1 – IDENTIFICATION**

**Trade Name:** Vulcan 20-XF & 20-XFW  
**Emergency Telephone. No:** (989)739-8050

**Manufacturer:** Vulcan Systems, LLC  
 5740 F-41, Oscoda, MI 48750  
 info@vulcan-systems.com

**SECTION 2 – HAZARDOUS IDENTIFICATION**

**Acute Toxicity, Inhalation:** Hazard Category 3  
**Carcinogenicity:** Hazard Category 1  
**Reproductive Toxicity:** Hazard Category 2  
**Germ Cell Mutagenicity:** Hazard Category 2



**Hazard Statements:** May cause respiratory irritation. May cause an allergic skin reaction. Suspected of causing cancer by inhalation.  
**Precautionary Statements:** Do not handle until safety precautions have been read and understood. Obtain special instructions before use. Avoid breathing dust/fume. Use only outdoors or in a well-ventilated area. Store locked up. Wear protective gloves and eye/face protection. If skin irritation or rash occurs, get medical advice or attention. If exposed or concerned, get medical advice/attention.

**SECTION 3 – COMPOSITION AND INFORMATION ON INGREDIENTS**

This information is protected by Trade-Secret

**SECTION 4 – FIRST AID PROCEDURES**

**Eye:** Flush affected areas with water for at least fifteen minutes. Seek medical assistance if necessary.  
**Skin:** Remove contaminated clothing. Wash affected area with large quantities of water for at least five minutes. Seek medical attention if necessary. Launder or dry-clean clothing before reuse.  
**Ingestion:** If subject is conscious, induce vomiting. If unconscious or convulsive, seek immediate medical assistance. Do not give anything by mouth to an unconscious or convulsive person.  
**Inhalation:** If signs and symptoms of toxicity are observed, remove subject from area, administer oxygen, and seek medical attention. Keep the subject warm and at rest. Perform artificial respiration if breathing has stopped.

**SECTION 5 – FIRE-FIGHTING MEASURES**

Non-flammable. **Extinguishing Media** – Co2 or Dry Chemical Extinguisher. Do not use water.

**SECTION 6 – ACCIDENTAL RELEASE MEASURES**

Prevent materials from entering sewers or contaminating the soil.

**SECTION 7 – HANDLING AND STORAGE**

Workers should wash hands and face before and after use of this product. Store in a cool location out of direct sunlight.

**SECTION 8 – EXPOSURE CONTROL/PERSONAL PROTECTION**

This section covers the material from which this product is manufactured. The term “hazardous ingredients” should be interpreted as a term required and defined in OSHA hazard communication standard.

**Composition/information on ingredients**

<b>Ingredient</b>	<b>CAS Number</b>	<b>%wt.</b>
Copper	7440-50-8	19-95
Silver	7440-22-4	1-55
Zinc	7440-66-6	2-44
Tin	7440-31-5	0-6

**Ingredients – Exposure Limits**

Copper	ACGIH TLVs: 0.2 mg/m <sup>3</sup> TWA (fume); 1 mg/m <sup>3</sup> TWA (dusts and mists)	OSHA PELs: 0.1 mg/m <sup>3</sup> TWA (fume); 1 mg/m <sup>3</sup> TWA (dusts and mists)
Silver	ACGIH TLV: 0.1 mg/m <sup>3</sup> TWA (metal)	OSHA PEL: 0.01 mg/m <sup>3</sup> TWA
Zinc	ACGIH TLVs (as ZnO): 2 mg/m <sup>3</sup> TWA; 10 mg/m <sup>3</sup> STEL (respirable fractions)	OSHA PEL: 5 mg/m <sup>3</sup> TWA (as respirable fraction of ZnO dust or fume)
Tin	ACGIH TLV: 2 mg/m <sup>3</sup> TWA	OSHA PEL: 2 mg/m <sup>3</sup> TWA

**Information on flux (20-XF only; 20-XFW has no flux)**

Chemical name	CAS #	% WW	EXPOSURE LIMITS IN AIR				
			ACGIH – TLV		OHSAs – PEL		IDLH MG/M <sup>3</sup>
			TWA MG/M <sup>3</sup>	STEL MG/M <sup>3</sup>	TWA MG/M <sup>3</sup>	STEL MG/M <sup>3</sup>	
BORIC ACID	10043-35-3	10-35	2, A4	NE	NE	NE	NE
PROPRIETARY FLUORIDE COMPOUND (EXPOSURE LIMITS ARE FOR INORGANIC, SOLID FLUORIDE COMPOUNDS, AS F, 7789-75-5)	PROPRIETARY	30-35	2.5, A4 (NOT CLASSIFIABLE AS A HUMAN CARCINOGEN)	NE	2.5	NE	NE
METHACRYLATE/ALIPHATIC & NAPHTHENIC HYDROCARBON COMPOUND	PROPRIETARY		NE	NE	NE	NE	NE
WATER	7332-77-0	BALANCE	NE	NE	NE	NE	NE

**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	flux-coated rod	Upper/lower flammability or exposure limits	N/A
Odor	N/A	Vapor Pressure	N/A
Odor threshold	N/A	Vapor density	N/A
pH	N/A	Relative Density	N/A
Melting point	Greater than 1220 degrees F	Solubility	N/A
Initial boiling point and boiling range	N/A	Flash point	N/A
Evaporation rate	N/A	Flammability	N/A
Partition coefficient	N/A	Auto-ignition temperature	N/A
Decomposition temperature	N/A	Viscosity	N/A

**SECTION 10 – STABILITY AND REACTIVITY**

Not Applicable

**SECTION 11 – TOXICOLOGICAL INFORMATION**

Not Applicable

**SECTION 12 – ECOLOGICAL INFORMATION**

Not Applicable

**SECTION 13 – DISPOSAL CONSIDERATIONS**

Not Applicable

**SECTION 14 – TRANSPORTATION INFORMATION**

Not Applicable

**SECTION 15 – REGULATORY INFORMATION****Regulatory information****United States Regulatory Information**

All components of this product are listed on the EPA's TSCA inventory. SARA Hazard Classes: Acute Health Hazard; Chronic Health Hazard SARA Section 313 Notification

These products contain these ingredients in concentrations greater than 1% (for carcinogens 0.1%) regulated under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 or 40 CFR 372.

Copper (CASRN 7440-50-8)

Silver (CASRN 7440-22-4)

Ingredient(s) - State Regulations

**SECTION 16 – OTHER INFORMATION**

Vulcan Systems, LLC, believes this data to be accurate, but no warranty, expressed or implied, is made.