

## RANITE F35

### Section 1: Identification

Product Name:	<b>Ranite F35</b>	Phone:	<b>909-483-3222</b>
MSDS Issue Date:	May 29, 2015	Fax:	<b>909-483-3233</b>
Synonyms:	N/A	E-Mail:	<a href="mailto:sales@rankin.com">sales@rankin.com</a>
CAS Number(s):	See section 3	Web Site:	<a href="http://www.broco-rankin.com">www.broco-rankin.com</a>
Product Usage:	Electrodes for welding		
Manufacturer:	<b>Rankin Industries</b> <b>400 S. Rockefeller Ave.</b> <b>Ontario, CA 91761 USA</b>		
Transportation Emergency Number:	Emergency Response & Training Solutions 1-800-924-6804 1-440-349-2700 CIN #: 3730		

### Section 2: Hazard(s) Identification

#### Classification of the substance or mixture

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

- Health, Skin corrosion/irritation, 1
- Health, Specific target organ toxicity - Single exposure, 3
- Health, Carcinogenicity, 1
- Health, Specific target organ toxicity - Repeated exposure, 2

#### GHS Label elements, including precautionary statements

GHS Signal Word: **DANGER**

#### GHS Hazard Pictograms:



#### GHS Statements:

- H314 - Causes severe skin burns and eye damage
- H335 - May cause respiratory irritation
- H350 - May cause cancer
- H373 - May cause damage to organs through prolonged or repeated exposure
- CGA-HG11 - SYMPTOMS MAY BE DELAYED.

#### GHS Precautionary Statements:

- P232 - Protect from moisture.
- P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
- P271 - Use only outdoors or in a well-ventilated area.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- CGA-PG27 - Read and follow the Safety Data Sheet (SOS) before use.

#### Hazards not otherwise classified (HNOC) or not covered by GHS

- Route of Entry:** Eyes; Skin
- Target Organs:** Throat; Nose, Respiratory system
- Inhalation:** Short term overexposure to welding fumes may result in discomfort such as: dizziness, nausea, or dryness or irritation of the nose, throat, lungs, and/or eyes. ACCUTE EFFECTS: Irritating to the nose, throat and respiratory tract. SUBCHRONIC/CHRONIC TOXICITY CHRONIC: Chronic overexposure to welding fumes can result in: Chronic respiratory problems, iron build-up in the lungs, bone erosion, reduced pulmonary functions and nervous disorders.
- Skin Contact:** The bright light produced by the arc can burn skin and eyes
- Eye Contact:** Fumes may be moderately irritating to the eyes

### Section 3: Composition / Information on Ingredients

Components of mixture*	CAS Number	Weight percentage**
Molybdenum	7439-98-7	0.15 – 4.2
Calcium Fluoride	7789-75-5	3 - 6
Feldspar	68476-25-5	0 – 1
Calcium Carbonate	1317-65-3	7 – 16
Potassium Oxalate Monohydrate	6487-48-5	0 – 1
Cellulose	9004-34-6	0 – 1.5
Bentonite Clay	1302-78-9	0 – 5
Sodium Silicate	6834-92-0	0 – 5
Potassium Silicate	1312-76-1	0 – 5
Iron	7439-89-6	68 – 97
Wollastonite	13983-17-0	0 – 1
Mica	12001-26-2	<0.3
Cobalt	7440-48-4	0 – 9.2
Aluminum	7429-90-5	<0.3
Vanadium	1314-62-1	0 – 0.65
Titanium	7440-32-6	0 – 0.5
Titanium Dioxide	13463-67-7	0 – 1.5
Tungsten Carbonyl	14040-11-0	0 – 4
Dolomite	16389-88-1	0 – 6
Sodium Silicate	1344-09-8	0 – 1.4

**IMPORTANT:** This section covers the materials from which these products are manufactured. The fumes and gases produced when welding with normal use of these products are covered in Section 11.

### Section 4: First Aid Measures

**EMERGENCY AND FIRST AID PROCEDURES** – Inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention. Non-irritating.

### Section 5: Firefighting Measures

Welding consumables are not flammable; however, the welding arc and sparks will ignite other combustible materials. Do not weld in the presence of combustible materials.

### Section 6: Accidental Release Measures

**GENERAL PROCEDURES:** Prevent waste from contaminating the surrounding environment. Discard any product, residue, disposable container or liner in an environmentally acceptable manner, in full compliance with federal, provincial, and local regulations.

### Section 7: Handling and Storage

Storage Requirements: Store in a dry area.

## Section 8: Exposure Controls / Personal Protection

Exposure Limits:			
Components of mixture	CAS Number	OSHA PEL mg/m <sup>3</sup>	ACGIH TLV mg/m <sup>3</sup>
Molybdenum	7439-98-7	15.0	10.0
Calcium Fluoride	7789-75-5	2.5 As F	2.5
Feldspar	68476-25-5	5.0 TWA	5.0 TWA
Calcium Carbonate	1317-65-3	15.0	2.0
Potassium Oxalate Monohydrate	6487-48-5	NL	NL
Cellulose	9004-34-6	10.0	10.0
Bentonite Clay	1302-78-9	5.0 (Dust)	5.0
Sodium Silicate	6834-92-0	NL	NL
Potassium Silicate	1312-76-1	NL	NL
Iron	7439-89-6	10.0	5.0 (oxide fume)
Wollastonite	13983-17-0	NL	NL
Mica	12001-26-2	3.0	3.0
Cobalt	7440-48-4	0.01 TWA	0.02 TWA
Aluminum	7429-90-5	15.0	10.0 NL
Vanadium	1314-62-1	0.05 TWA	1.0 TWA
Titanium	7440-32-6	10.0 NL	10.0
Titanium Dioxide	13463-67-7	10.0 NL	10.0
Tungsten Carbonyl	14040-11-0	5.0 TWA, 10.0 STEL	5.0 TWA, 10.0 STEL (inhalable)
Dolomite	16389-88-1	NL	NL
Sodium Silicate	1344-09-8	NL * NL = Not Listed	NL

CLG: Ceiling Limit

STEL: Short Term Exposure Limit

**Respiratory Protection** – Use sufficient ventilation, local exhaust at the arc, or both to keep the fumes and gases below TLV's in the workers breathing zone. In confined spaces, use respirable fume respirator or air-supplied respirator.

**Eye Protection** – Wear eye/face protection.

**Protective Clothing** – The intensity of the arc and the sparks emitted from it can cause severe burns. All skin should be covered.

## Section 9: Physical and Chemical Properties

Physical State: The welding consumable discussed herein is composed of a wire strip or solid wire rod with or without a flux based core or outer coating.

## Section 10: Stability and Reactivity

**Hazardous Decomposition:** The composition and quantity of welding fumes generated are dependent upon several variables including the base material, base material contaminants and/or coatings (paint, galvanized, etc.) welding process utilized. Other factors that will affect the quantity of fumes available for inhalation are the number of welding operators in a designated work area, the quality of ventilation, the position of the operator with respect to the fume plume, as well as the presence of contaminants in the atmosphere from other manufacturing operations. Reasonably expected fume constituents of this product would include: complex oxides of iron, manganese, silicon, chromium, nickel, molybdenum, calcium, magnesium, and titanium.

COMMENTS: No hazard exists until this product is used in welding.

## Section 11: Toxicological Information

REPRODUCTIVE TOXIN: Not known

MUTAGENICITY: Not known

## Section 12: Ecological Information

ENVIRONMENTAL DATA: No data available

### Section 13: Disposal Consideration

Dispose of in accordance with federal, state and local regulations.

### Section 14: Transport Information

SPECIAL SHIPPING NOTES: Special shipping considerations for this product are limited to those necessary to prevent damaging the product.

### Section 15: Regulatory Information

Component (CAS#) [%] - CODES

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Molybdenum: soluble and insoluble compounds (7439-98-7) [0.15-4.2%] MASS, OSHAWAC, PA, TSCA, TXAIR  
Calcium carbonate (limestone) (1317-65-3) [7-16%] MASS, OSHAWAC, PA, TSCA, TXAIR  
Calcium fluoride (CaF<sub>2</sub>) (7789-75-5) [3-6%] TSCA  
Feldspar-group minerals (68476-25-5) [0-1%] TSCA  
Potassium oxalate monohydrate (6487-48-5) [0-1%]  
Cellulose (9004-34-6) [0-1.5%] MASS, OSHAWAC, PA, TSCA, TXAIR  
Bentonite clay (1302-78-9) [0-5%] TSCA  
Sodium silicate (6834-92-0) [0-5%] TSCA  
Potassium silicate (1312-76-1) [0-5%] TSCA  
Iron (7439-89-6) [68-97%] TSCA  
Wollastonite (13983-17-0) [0-1%]  
Cobalt (7440-48-4) [0-9.2%] MASS, NJHS, OSHAWAC, PA, PROP65, SARA313, TSCA, TXAIR  
Titanium dioxide (13463-67-7) [0-1.5%] MASS, OSHAWAC, PA, TSCA, TXAIR  
Tungsten carbonyl (W(CO)<sub>6</sub>), (OC-6-11)- (14040-11-0) [0-4%] TSCA  
Dolomite (CaMg(CO<sub>3</sub>)<sub>2</sub>) (16389-88-1) [0-6%] TSCA  
Sodium Silicate (1344-09-8) [0-1.4%] TSCA

Regulatory Code Descriptions

RQ = Reportable Quantity	MASS = MA Massachusetts Hazardous Substances List
OSHAWAC = OSHA Workplace Air Contaminants	PA = PA Right-To-Know List of Hazardous Substances
TSCA = Toxic Substances Control Act	TXAIR = TX Air Contaminants with Health Effects Screening
NJHS = NJ Right-To-Know Hazardous Substances	PROP65 = CA Prop 65
SARA313 = SARA 313 Title III Toxic Chemicals	

### Section 16: Other Information

NFPA Numbers (estimated)	Health: 2	Flammability: 0	Reactivity: 0
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WHMIS Category: Class D, Division 2: Chromium



The information supplied herein follows the guidelines of WHMIS, GHS, OSHA Hazard Communication Standard 29 CFR 1910.1200 and California Proposition 65, to the best of our knowledge, is accurate and complete. The recommended hygiene and handling practices are believed to be appropriate for the use of this material. However, it is up to the end user to review this information and establish their own procedures and guidelines, based upon their particular application(s). Rankin Industries assumes no responsibility for damage or injury resulting from the end use of this product.