



MATERIAL SAFETY DATA SHEET

For Welding Consumables and Related Products
Essentially Similar to U.S. Department of Labor Form OSHA 20
(to comply with OSHA Hazard Communication Standard 29 CFR 1910.1200)

SECTION I IDENTIFICATION

Manufacturer/Supplier Name: UNIBRAZE CORP.
Address: 1050 PENNER CREST, HOUSTON, TX 77055
Emergency Phone: (713) 869-6000, 1-800-364-6900

Trade Name: UNIBRAZE CHAMFERARC

SECTION II COMPOSITION / INFORMATION ON INGREDIENTS

PREPARATION: Core wire: Mn<1%; Si<0,6%; C<0,1%; Iron bal.

Hazardous ingredients:

Important: This section covers the materials of which the products are manufactured. The fumes and gases produced during normal use of this product are covered in Section V. The term "Hazardous" in "Hazardous Material" should be interpreted as a term required and defined in OSHA Hazard Communication Standard 29CFR 1910-1200 and it does not necessarily imply the existence of hazard. The chemicals or compounds reportable by Section 313 of SARA are marked by the symbol #.

INGREDIENTS	CAS#	% RANGE	OSHA PEL mg/m3	ACGIH-TLV mg/m3	CARCINOGENICITY	R-PHASE
Iron	7439-89-6	65-75	5	10 (as Fe 2O3)		NO
Cellulose	9004-34-6	5-15	5	5	NO	
Iron Oxide	1 1309-37-1	1-11	5	5		NO
Sodium Silicate	1344-09-8	5-15	Not Regstrd.	5		NO
Potassium Silicate	1312-76-1	1-11	Not Regstrd.	5	NO	
*Titanium Dioxide	13463-67-7	1-11	15	2.5 (dust)	NO	
*Manganese	7439-96-5	1-11	1	1.0	NO	

SECTION III HAZARD IDENTIFICATION

Effect of acute exposure: Route of entry: Inhalation and skin contact

Eye and Skin: when welding, arc rays can injure eyes and burn skin

Inhalation: Exposure to nickel containing dust and welding fumes, may cause irritation to upper respiratory tract. May cause respiratory sensitization in susceptible individuals. Reasonable expected decomposition products from normal use of these products include a complex of the oxides of the materials listed in Section 2, as well as carbon monoxide, carbon dioxide, ozone, and nitrogen oxides (refer to "Characterization of Arc Welding Fume" available from the American Welding Society). THE TLV FOR MANGANESE (0.02 mg/m^3) WILL BE REACHED BEFORE THE GENERAL LIMIT FOR WELDING FUMES OF 5 mg/m^3 IS REACHED. MONITOR FUMES FOR MAGANESE LEVELS. The only way to determine the true identity of the decomposition products is by sampling and analysis. The composition and quantity of the fumes and gases to which a worker may be overexposed can be determined from a sample obtained from inside the welder's helmet, if worn, or in the worker's breathing zone. See ANSI/AWS F1.1 "Method for Sampling Airborne Particles Generated by Welding and Allied Processes." Available from the American Welding Society.

Ingestion: Amounts ingested incidental to industrial handling not likely to cause injury. Single dose oral toxicity is low.

Effects of chronic exposure: Refer to section 11 for specific toxicological information.

SECTION IV FIRST AID MEASURES

Inhalation: Remove victim to fresh air if effects occur.

Skin: Wash off with soap and plenty of water.

Eyes: Irrigate with water for several minutes.

Ingestion: Rinse mouth.

Note to physician: No particular advice.

SECTION IV FIRE FIGHTING MEASURES

Means of extinguishing: No danger requiring special measures.

Special protective equipment when fighting fire: none.

SECTION VI ACCIDENTAL RELEASE MEASURES

Cleaning measures: Remove spoiled product mechanically.

SECTION VII HANDLING AND STORAGE

Handle with standard transportation equipment.
Store in a dry place in closed packages.

SECTION VIII EXPOSURE CONTROLS/ PERSONAL PROTECTION

Technical measures: Use adequate local exhaust for welding fumes. Avoid grinding and dust inhalation
Exposure limits: see section 2. Fumes in cutting and gouging depend on the material for which the product is used.

Personal protection:

- Respiratory protection: use an air purifying dust respirator.
- Hands protection: wear appropriate gloves to prevent skin contact.
- Eyes protection: welder's helmets.
- Skin protection: wear appropriate overalls to prevent skin or body contact.

SECTION IX PHYSICAL AND CHEMICAL PROPERTIES

Physical state: solid.

pH : non applicable

Relative density: 5-8 g/cm³

Odor : none

Melting Point: 1800-2700° F 1000-1500° C

Solubility: insoluble in water

SECTION X STABILITY AND REACTIVITY

STABILITY Conditions to avoid: not applicable.

Materials to avoid: reacts with acids.

Hazardous decomposition products: unknown.

SECTION XI TOXICOLOGICAL INFORMATION

Effects of acute exposure

Toxicity to animals: unknown

Local effects: not applicable.

Inhalation: not applicable for the product. For welding fumes see section 3.

When using on stainless steel or other Cr containing alloys, in the fumes Chrome (VI) is present, which causes cancer

Ingestion: not applicable.

Contact with skin: no adverse effects expected.

CARCINOGENICITY: Effects of chronic (long -term) overexposure to air contaminants may lead to their accumulation in the lungs, a condition which may be seen as dense areas on chest X-rays. The severity of the change is proportional to the length of exposure. The changes seen are not necessarily associated with symptoms or signs of reduced lung function or disease. In addition, the changes on X-rays may be caused by non-work factors such as smoking, etc. Nickel and chromium (in some products) are considered carcinogenic. Long term overexposure to nickel fumes may also cause pulmonary fibrosis and edema. Overexposure to manganese compounds may affect the central nervous system, symptoms of which are languor, sleepiness, muscular weakness, emotional disturbances, and spastic gait. The effect of manganese on the nervous system is irreversible.

**SECTION XII
ECOLOGICAL INFORMATION**

About product: data are unknown

About ingredients: data are unknown.

**SECTION XIII
TOXICOLOGICAL INFORMATION**

Product: For product elimination, consult recycling companies or appropriate local authority.

Package: May be disposed in approved landfills provided local regulations are observed.

**SECTION XIV
TRANSPORTATION INFORMATION**

INTERNATIONAL REGULATIONS:

Land shipment: no hazard

- Rail / route (RID/ADR):

Sea shipment: no hazard

Shipment by air: no hazard

**SECTION XV
REGULATORY INFORMATION**

Label CEE: not necessary

Danger symbols and indications: R-Phrases :

S-Phrases:

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