SUMY-ELECTRODE

Material Safety Data Sheet - MSDS

Section 1. Chemical Product and Company Identification
Product name - SF7018
Classification E4918-H8
CSA: W48-14
AWS: E7018-1

Section 2. Hazards Identification
Physical state and Appearance : Solid.
Emergency overview ¡Routes of entry
Potential acute health effects
Potential chronic health effects
Medical conditions aggravated by over-exposure

These hazards relate to welding fumes (electrodes in use) and not to the electrodes as sold.

Please read carefully the following information before starting welding!

1. Working in manual arc welding area one can get injuries by heat emission of the welding arc and hot metal splashes so to avoid any risks please follow safety instructions.

2. Start welding after reading preliminary instruction and always use personal protective equipment at work.
3. For indoor manual arc welding one must use local extractors which clean the air from solid and gas phase of welding aerosol.
4. Avoid welding if local extractors that are out of order.
5. Avoid welding without personal protective equipment.
6. To reduce the danger of electric shock the worker must have special carpet or rubber shoes, gloves of EN-type in accordance with the normative and technical documentation.

Ingestion

Since the product (welding fumes) is a gas and that it is mostly probable that it will be inhaled more than ingested, please consider first to look at the preventive measures in case of inhalation.

Carcinogenicity

Product/ingredient:

Auxiliary: Chemical composition

SF 7018

C	0.08
Si	0.40
Mn	1.20
S	0.020
P	0.025

Section 3. First Aid Measures

Eye contact

:

Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately. **Skin contact**

:In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and
shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately. **Inhalation**

:Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial
respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately. **Ingestion :**Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth
to an unconscious person. Get medical attention immediately.

Section 4. Fire Fighting Measures

Flammability of the product

Non-flammable. Emits toxic fumes when heated. **Explosibility**

Fire-fighting media and

Use an extinguishing agent suitable for the surrounding fire. **instructions**

:Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks

and mechanical impacts.

Section 5. Accidental Release Measures

Small/Large Spill and Leak

Use appropriate tools to transfer the spilled solid to a convenient waste disposal container.

Section 6. Handling and Storage

Handling

:

Avoid contact with eyes. Avoid breathing dust. Avoid prolonged or repeated contact with skin. Do not get on skin or clothing. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Avoid contact of spilled material and runoff with soil and surface waterways. **Storage :**All filler metals in their original, unopened containers should be kept in a relatively dry storage area at temperatures between 15°C (60°F) and 30°C (80°F) and 50% maximum relative humidity.

Exposure Controls, Personal Protection

Engineering controls

:Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local

exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. **Personal protection**

Eyes

:Safety glasses with side shields. Face shield with radiation shielding. **Body**

:Full suit. Fire resistant. **Respiratory**

:Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear a canister breathing apparatus (respirator) or

a supplied-air respirator, when required, to weld in a confined space or when room exhaust or ventilation does not keep exposure below the acceptable values. **Hands**

Gloves. Fire resistant. **Feet**

Metal cap, safety boots.

Section 7. Physical and Chemical Properties

Physical state and Appearance Solid.

Color Grayish-white.

Odor : Odorless.

Melting/freezing point : 1540 to 2030°C (2804 to 3686°F)

Specific gravity Not available.

Solubility Insoluble in the following materials: cold water and hot water.

Section 8. Stability and Reactivity

Stability and reactivity

:The product is stable. **Hazardous decomposition**

:Metallic oxides. carbon oxides (CO, CO2) Arc radiation can support the production of ozone and nitrogen oxides. **products Hazardous polymerization**

Under normal conditions of storage and use, hazardous polymerization will not occur. anticipated to be human carcinogens.) by NTP [Nickel]. Classified A5 (Not suspected for humans.) by ACGIH [Nickel]. Contains material which may cause damage to the following organs: blood, kidneys, lungs, the nervous system, upper respiratory tract, skin, eyes, bones, central nervous system (CNS), teeth.

Section 9. Disposal Considerations

: Waste must be disposed of in accordance with federal, state and local environmental control regulations. Recycle, if possible. ***Consult your local or regional authorities.***

Transport Information

No transport class is found applicable to this product.

Section 10. Regulatory Information

HCS Classification

:These hazards relate to welding fumes (electrodes in use) and not to the electrodes as sold.

Irritating material Sensitizing material Carcinogen Target organ effects **U.S. Federal regulations**

WHMIS (Canada)

:

These hazards relate to welding fumes (electrodes in use) and not to the electrodes as sold.

Class D-2A: Material causing other toxic effects. Class D-2B: Material causing other toxic effects (Toxic). **CEPA Toxic substances**: The following components are listed:

Inorganic fluorides **Canadian ARET**: None of the components are listed. **Canadian NPRI**: The following components are listed: Aluminum oxide (fibrous forms only); Manganese (and its compounds); Calcium fluoride **Alberta Designated Substances**: None of the components are listed. **Ontario Designated Substances**: None of the components are listed. **Quebec Designated Substances**: None of the components are listed. **This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.**

Notice to reader THE INFORMATION, RECOMMENDATIONS AND DATA CONTAINED IN THIS DOCUMENT ARE INTENDED TO BE USED BY PROPERLY TRAINED AND QUALIFIED PERSONNEL ONLY AND AT THEIR SOLE RISKS AND DISCRETION. THE INFORMATION, RECOMMENDATIONS AND DATA HEREIN CONTAINED ARE DERIVED FROM SOURCES WHICH WE BELIEVE TO BE RELIABLE. HOWEVER, AIR LIQUIDE CANADA INC. MAKES NO REPRESENTATION AND GIVES NO WARRANTY OF ANY KIND WHATSOEVER WITH RESPECT TO THEIR ACCURACY OR COMPLETENESS AND ASSUMES NO LIABILITY FOR DAMAGES OR LOSS ARISING DIRECTLY OR INDIRECTLY FROM THEIR USE, WHETHER PROPER OR IMPROPER.