

SAFETY DATA SHEET

DeepTIG™ SS-7

DATE REVISED: November 09, 2017

SECTION 1 -- IDENTIFICATION

Product Name/Part number: DeepTIG™ SS-7

Recommended use: GTA Welding Flux for Carbon Steel Alloys

Manufacturer: Superior Flux & Mfg. Co.
6615 Parkland Blvd
Cleveland OH, 44139

Emergency Contact: CHEMTREC
Emergency Phone: 1-800-424-9300
For other info: (440) 349-3000

SECTION 2 – HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

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

Acute toxicity, Oral (Category 3) H301

Acute toxicity, Inhalation – dust, mist (Category 4) H332

Respiratory sensitization (Category 1) H334

Skin sensitization (Category 1) H317

Carcinogenicity (Category 1A) H350

See below for full text of H-Statement

GHS Label Elements, including precautionary statements

Pictogram(s):



Signal Word: Danger

Hazard Statement(s)

H301 Toxic if swallowed

H317 May cause an allergic skin reaction

H332 Harmful if inhaled

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

H350 May cause cancer

Precautionary statement(s)

P261 Avoid breathing dust or fumes.

P264 Wash exposed skin thoroughly after handling

P270 Do not eat, drink, or smoke when using this product

P271 Use only outdoors or in a well-ventilated area

P272 Contaminated work clothing must not be allowed out of the workplace

P280 Wear protective clothing and face protection

P284 [In case of inadequate ventilation] wear respiratory protection

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor

P302+P352 IF ON SKIN: Wash with plenty of water

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing

P308+P313 If exposed or concerned: Get medical advice.

P312 Call a POISON CENTER or doctor if you feel unwell.

P333+P313 If skin irritation or rash occurs: Get medical advice or attention

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor

P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up
P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations.

Hazards not otherwise classified or not covered by GHS: Inhalation of dusts and fumes can cause metal fume fever. Symptoms can include a metallic or sweet taste in the mouth, sweating shivering, headache, throat irritation, fever, chills, thirstiness, muscle aches, nausea, vomiting, weakness, fatigue, and shortness of breath.

SECTION 3 – COMPOSITION INFORMATION

| Components | CAS Number | % |
|----------------|------------|-------|
| Titanium oxide | 12137-20-1 | 20-60 |
| Chromium oxide | 1308-38-9 | 0-50 |

Unlisted percentages are non-hazardous stabilizers, and water.

SECTION 4 – FIRST AID MEASURES

Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Inhalation: If breathed in, move to fresh air. If not breathing, give artificial respiration. Consult a physician.

Eyes: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most Important Symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in section 2 (labeling)

SECTION 5 – FIREFIGHTING MEASURES

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Special Hazards: Use of heavy stream of water may spread fire. Product is not flammable, nor is it explosive. Hazardous reactions will not occur under normal condition.

Special Advice for Firefighters: Exercise caution when fighting any chemical fire. Do not breathe fumes or vapors from fire. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment and emergency procedures: Avoid all unnecessary exposure. Do not breathe dust or fumes. Evacuate unnecessary personnel. Ventilate area and equip cleanup crew with proper protection.

See section 8 for personal protection.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter sewers and public waters.

In Case Material is spilled: Clear up spills immediately and dispose of waste safely. Keep and place in suitable, closed containers for disposal according to local regulations. Avoid generation of dust during clean-up

SECTION 7 - HANDLING AND STORAGE

Specific End Use(s): Penetration enhancing compound for GTA Welding of Carbon Steel Alloys.

For professional use only.

Precautions for safe handling: Do not handle until all safety precautions and any special instructions have been read and understood. Do not breathe dust or fumes.

General Precautions: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

Additional Hazards when Processed: Fumes from welding, or processing of this material can be harmful if inhaled. Risk of electric shock when welding. Arc rays and sparks can burn skin. This product is intended for use in ARC welding. During this process UV rays irritate the superficial corneal epithelium, causing inhibition of mitosis, production of nuclear fragmentation, and loosening of the epithelial layer. Under experimental conditions in animals, phototoxic effects have been demonstrated at all levels of the cornea, including the stroma and endothelium.

For full precaution statements see Section 2

Storage Requirements: Keep container tightly closed in a dry, cool, and well-ventilated area. Keep container closed when not in use. Store locked up.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION CONTROL PARAMETERS

OSHA Permissible Exposure Limit (PEL): 0.5 mg/m³

ACGIH Threshold Limit Value (TLV): 0.5 mg/m³

Engineering Controls: Local exhaust and general ventilation must be adequate to meet exposure standards. Site-specific risk assessments should be conducted to determine the appropriate exposure control measures. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Ensure all national/local regulations are observed.

Respiratory Protection: During instances of insufficient ventilation or whenever exposure may exceed established Occupational Exposure Limits, use a NIOSH-approved respirator or self-contained breathing apparatus.

Protective Gloves: Wear chemically resistant protective gloves. Use proper glove removal techniques (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good lab practices. Wash and dry hands after handling.

Eye Protection: Wear goggles with suitable filter lenses when use is cutting or welding.

Body Protection: Wear fire/flame resistant/retardant clothing. Protective coveralls and long sleeves is recommended.

Use equipment for protection tested and approved under appropriate government standards such as NIOSH (USA) or EN 166, CEN (EU)

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

SECTION 9 - PHYSICAL AND CHEMICAL CHARACTERISTICS

| | |
|--|-------------------|
| Appearance | Green Powder |
| Odor | None |
| Odor threshold | No data available |
| pH | Not applicable |
| Melting point/Freezing point | No data available |
| Initial boiling point and boiling range | No data available |
| Flash point | No data available |
| Evaporation rate (Butyl Acetate = 1) | Not applicable |
| Flammability (Solid, gas) | No data available |
| Upper flammability or explosive limits | No data available |
| Lower flammability or explosive limits | No data available |
| Vapor pressure | Not applicable |
| Vapor density (Air = 1) | Not applicable |
| Relative density (Water = 1) | No data available |
| Solubility(ies) | Inoluble in water |
| Partition coefficient: n-octanol/water | No data available |
| Auto-ignition temperature | No data available |
| Decomposition temperature | No data available |
| Viscosity | Not applicable |

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: Will not occur under normal conditions

Stability: Product is stable under recommended storage and handling conditions

Possibility of hazardous reactions: Hazardous polymerization will not occur

Conditions to Avoid: No specific data available

Incompatibility: Strong oxidizers

Hazardous Decomposition Products Carbon oxides (CO, CO₂). Metal oxides. When heated, material emits irritation and harmful fumes.

In the event of fire: See Section 5

SECTION 11 - TOXICOLOGICAL INFORMATION

Likely Route(s) of Exposure: Inhalation, ingestion, skin and eye contact

Acute Toxicity: Toxic if swallowed. Harmful if inhaled.

| | |
|------------------------|--------------------------|
| ATE (Oral) | 100.00 mg/kg body weight |
| ATE (Dust/Mist) | 1.50 mg/L per 4h |

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause and allergic skin reaction.

Germ Cell Mutagenicity: Not classified

Carcinogenicity: May cause cancer: IARC Group 3

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. During welding, the most significant route of exposure is by the inhalation (breathing) of welding fumes. If welding fumes are inhaled, they can cause a condition commonly known as metal fume fever with symptoms which resemble influenza. Symptoms may be delayed 4-12 hours and begin with a sudden onset of thirst, and a sweet, metallic or foul taste in the mouth. Other symptoms may include upper respiratory tract irritation accompanied by coughing and a dryness of the mucous membranes, lassitude and a generalized feeling of malaise. Fever, chills, muscular pain, mild to severe headache, nausea, occasional vomiting, exaggerated mental activity, profuse sweating, excessive urination, diarrhea and prostration may also occur.

Symptoms/Injuries After Skin Contact: May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: May cause eye irritation.

Symptoms/Injuries After Ingestion: Toxic if swallowed.

Chronic Symptoms: May cause cancer.

SECTION 12 - ECOLOGICAL INFORMATION

Toxicity No data available
Persistence and degradability No data available
Bioaccumulative potential No data available
Mobility in soil No data available
Other adverse effects Avoid release into the environment.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Offer surplus and non-recyclable solutions to a licensed professional waste disposal company. Avoid release to the environment

SECTION 14- TRANSPORTATION

D.O.T., IMDG and IATA: Not regulated for transport

SECTION 15 - REGULATORY INFORMATION

SARA 311/312 Hazards Acute health hazard, Chronic health hazard

Substances listed on the U.S. Toxic Substances Control Act (TSCA) inventory:

| Substance | CAS No. |
|----------------|------------|
| Chromium oxide | 1308-38-9 |
| Titanium oxide | 12137-20-1 |

Substances listed on U.S. State Regulation lists:

| List | Substance | CAS No. |
|---|----------------|-----------|
| Massachusetts – Right to Know List | Chromium oxide | 1308-38-9 |
| New Jersey – Right to Know Hazardous Substance List | Chromium oxide | 1308-38-9 |

SECTION 16 - OTHER INFORMATION

Further information:

Judgments as to the suitability of information herein or the purchaser's purposes are necessarily the purchaser's responsibility. The above information does not represent any guarantee of the properties of the product. It is believed to be correct, but does not purport to be all inclusive and should be used only as a guide. Reasonable care has been taken in the preparation of this material, and is based on the present state of our knowledge.

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Reference(s):

EWI SDS

Preparation information

Superior Flux & Mfg. Co.
440-349-3000

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