

SAFETY DATA SHEET

DeepTIG™ SS-7

DATE REVISED: December 10, 2018

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)

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P261	Avoid breathing dust or fumes.
P264	Wash hands, forearms, and any 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, protective gloves, eye protection, 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
Silica, amorphous, fumed, crystalline-free	112945-52-5	0-20

Unlisted percentages are non-hazardous stabilizers, and water.

SECTION 4 – FIRST AID MEASURES

Description of first aid measures

General advice: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice. Show this safety data sheet to the doctor in attendance.

Inhalation: When symptoms occur: go into open air and ventilate suspected area. If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. If exposed or concerned: Get medical advice/attention.

Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin: Gently wash with plenty of soap and water. Obtain medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

Ingestion: Rinse mouth. Do NOT induce vomiting. Seek medical attention immediately.

Most Important Symptoms and effects, both acute and delayed

In general: Toxic if swallowed. May cause an allergic skin reaction. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause cancer.

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.

After Skin Contact: May cause an allergic skin reaction.

After Eye Contact: May cause eye irritation.

After Ingestion: Toxic if swallowed.

Chronic Symptoms: May cause cancer.

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. Prevent product from entering sewers and public waters.

In Case Material is spilled: Clear up spills immediately and dispose of waste safely. Keep 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 and hazard 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

	Silica, amorphous	Chromium oxide (Cr₂O₃)
OSHA Permissible Exposure Limit (PEL):	5 mg/m ³	1 mg/m ³

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)	Insoluble 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 Immediate (acute) health hazard, Delayed (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 – SS7

Preparation information

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