

MATERIAL SAFETY DATA SHEET

02/19/2015

Amtec SR71 Shock Resisting Tool Steel

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Amtec SR71 Shock Resisting Tool Steel

MANUFACTURER

24 HR. EMERGENCY TELEPHONE NUMBERS

Amtec Welding Products, Inc. 2800 Capital Street

Wylie, TX 75098

Emergency Phone: (800) 223-5712

Chemical Name	<u>Wt.%</u>	CAS#
Carbon	0.05 - 1.6	1333-86-4
Manganese compounds	0.15 - 1.3	7439-96-
Silicon	0.15 - 1.6	7440-21-3
Chromium	0.4 - 6	7440-47-
Nickel metal	0.25 - 2	7440-02-0
Soluble compounds, as Mo	0.15 - 10	7439-98-
Tungsten Metal Powder	0.45 - 7	7440-33-
Vanadium pentoxide (respirable dust)	0.15 - 2.5	1314-62-
Iron	Bal	7439-89-
Titanium dioxide	2 - 15	13463-67-
Calcium Carbonate (limestone)	4 - 50	1317-65-
Calcium Fluoride	2 - 20	7789-75-
Silica, crystalline	0.5 - 5	14808-60-
Sodium carboxymethylcellulose	0.5 - 5	9004-32-
Bentonite Clay	0.08 - 6	1302-78-
Potassium Titanate	4 - 10	12030-97-
Zirconium Silicate	1 - 5	14940-68-
Talc	1 - 5	14807-96-
Potassium Oxalate	0.5 - 1.5	583-52-
Sodium Polysilicate	1 - 11	1344-09-
Silicic Acid	1 - 10	1312-76-

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200):

EXPOSURE LIMITS

Chemical Name	OSHA PEL	ACGIH TLV
Manganese compounds	5 mg/m3	1 mg/m3
Silicon	10 mg/m3 * = Total dust, ^ = Respirable fraction	10 mg/m3 Total Dust
Chromium	1 mg/m3	0.5 mg/m3
Nickel metal	1 mg/m3	1.5 mg/m3
Soluble compounds, as Mo	15 mg/m3	10 mg/m3
Titanium dioxide	10 mg/m3 NL = Not Listed	10 mg/m3
Calcium Carbonate (limestone)	15 mg/m3 * NL = Not Listed	2 mg/m3
Calcium Fluoride	2.5 mg/m3 As F	2.5 mg/m3
Silica, crystalline	0.1 mg/m3	0.05 mg/m3
Sodium Polysilicate	NL	NL

POTENTIAL HEALTH EFFECTS

EYES: Fumes may be moderately irritating to the eyes.

SKIN: The bright light produced by the arc can burn skin and eyes.

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.

ACUTE 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.

4. FIRST AID MEASURES

INHALATION: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

5. FIRE FIGHTING MEASURES

GENERAL HAZARD: 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.

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.

7. HANDLING AND STORAGE

STORAGE: Store in a dry area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTION

EYES AND FACE: S39 - Wear eye/face protection.

RESPIRATORY: 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.

PROTECTIVE CLOTHING: The intensity of the arc and the sparks emitted from it can cause severe burns. All skin should be covered.

9. PHYSICAL AND CHEMICAL PROPERTIES

COMMENTS:

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.

10. STABILITY AND REACTIVITY

HAZARDOUS DECOMPOSITION: The composition and quantity of welding fumes generated are dependent upon several variable including the base material, base material contaminants and/or coatings (paint, galvanizing etc.) welding process utilized. Other factors that will effect 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.

11. TOXICOLOGICAL INFORMATION

REPRODUCTIVE TOXIN: Not known

MUTAGENICITY: Not known

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: No data available

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

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

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

313 REPORTABLE INGREDIENTS: This product contains some or all of the following reportable ingredients; Copper, Chromium, Manganese and Nickel

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: All components of this product are listed on or exempt from the TSCA inventory.

"WARNING: This product contains the following chemical(s) known to the state of California to cause cancer: Nickel (metallic) CAS# 7440-02-0 and Crystalline Silica CAS# 14808-60-7."

16. OTHER INFORMATION

NFPA CODES

FIRE: 0 HEALTH: 2 REACTIVITY: 0