MSDS - Date of issue Jan 1, 2004

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MATERIAL SAFETY DATA SHEET

For manufactured welding consumables and related Products
Conform to Hazard Communication Standard 29CFR 1910.1200 Rev. October 1988

Manufacturer / Supplier : product type:

SIDERGAS SPA
Viale Rimembranza # 17
37010 S. AMBROGIO (VERONA) ITALY

product type:

CARBON STEEL ELECTRODE SIDERGAS S6
conforms to:
AWS SFA 5.18 grade ER70S-6 (EN 440 G3Si1)

SECTION II - HAZARDOUS MATERIAL (1)

IMPORTANT!!

This section covers the materials from which this product is manufactured. The fumes and gases produced during welding with the normal use of this product are covered by Section V: see it for industrial hygene information.

CAS Number shown is representative for the ingredients listed.

(1) The term "Hazardous" in "Hazardous Materials" should be interpreted as a term required and defined in the Hazards Communication Standard and does not necessarily imply the existence of any hazard.

| INGREDIENTS | CAS No. | WT. % | TLV | PEL |
|---------------------------------------|-------------|-------|--------|---------|
| | 1 1 1 1 1 1 | 1 | mg/m³ | mg/m³ |
| CARBON STEEL WIRE | | 100 | 10* | 10* |
| Nominal Composition: | | | | |
| Total manganese ** | 7439-96-5 | < 2 | 0.2 | 1.0 (c) |
| Total Copper including Copper coating | 7440-50-8 | < 0.5 | 0.2(a) | 0.1(a) |
| Iron | 7439-89-6 | Bal. | 10* | 10* |

SUPPLEMENTAL INFORMATION:

- (*) Not listed Nuisance value. Maximum is 10 mg per cubic meter. PEL value for iron oxide is 10 mg/m3. TLV value for iron oxide is 5 milligrams per cubic meter.
- (**) Subject to the reporting requirement of section 311, 312 and 313 of the Emergency Planning and Community Right-to-know Act of 1986 and of 40CFR 370 and 372
- (a) Values are for copper fume.
- (c) Ceiling Value not to be exceeded at any time.

SECTION III - FIRE AND EXPLOSION HAZARD DATA

Non Flammable; Welding are and sparks can ignite Combustible And flammable products. See Z49.1 referenced in Section VI.

SECTION IV - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: The ACGIH recommended general limit for Welding Fume NOC - (Not otherwise Classified) is 5 mg/m3. ACGIH-1987-88 preface states that the TLV-TWA should be used as guides in the control of health hazards and should not be used as fine lines between safe and dangerous concentrations. See section V for specific fume constituents which may modify this TLV. Threshold Limit values are figures published by the American Conference of Government Industrial Hygienists. Units are milligram per cubic meter of air.

EFFECTS OF OVEREXPOSURE: Electric arc welding may create one or more of the following health hazards:

- Fumes and Gases can be dangerous to your health. Common entry is by inhalation.
- Short term (acute) overexposure to welding fumes may result in discomfort such as dizziness, nausea, or dryness or irritation of nose, throat, or eyes.
- · Long-term (chronic) overexposure to welding fumes call lead to siderosis (iron deposit in lung) and affect pulmonary function.
- Arc Rays can injure eyes and burn skin. Electric shock can kill.

