# A Zinc 15% Aluminum Wire made for the Electric Arc Spray Process

# EuTronic<sup>®</sup>Arc 521Wire



• A corrosion protection coating superior to Zinc and Aluminum coatings especially in atmospheric environments



# **PRODUCT DESCRIPTION:**

EuTronic Arc 521AS is made exclusively for arc spraying; it is an alloy of 85 percent zinc and 15 percent aluminum and is not contaminated in the arc spray process.

The as-sprayed properties provide resistance to atmospheric corrosion. The applied coating can also be used for galvanizing applications and general oxidation resistance. It provides better corrosion resistance than zinc or aluminum wire alone.

# **TYPICAL APPLICATIONS:**

This coating can be used in applications where zinc and aluminum coatings are being applied. Better corrosion protection is seen in atmospheric corrosion applications especilally if crevice corrosion is likely to occur and where the coating may be scratched or scored in use.

For marine and freshwater applications where the coating will be immersed, the coating must be used with a sealer to allow long term corrosion protection.

# **TYPICAL WIRE CHARACTERISTICS:**

Typical Composition: Zinc: 85% Aluminum: 15%

# **TYPICAL COATING CHARACTERISTICS:**

Melting Temperature:	824°F (440°C)
Bond Strength:	3680 psi (25.4 MPa)
Deposit Efficiency:	70 %
Hardness:	73 HRB
Coating Density:	4.97 gm/cm <sup>3</sup>
Spray Rate:	21 lbs/hr/100 amps
Wire Coverage:	0.8 oz / ft²/0.001"
Finishing:	N/A. Coating is used as-spraye

# **PROCEDURE FOR USE:**

Surface should be clean, white metal, with no oxides (rust), dirt, grease, or oil on the surface to be coated.

Note: It is best not to handle surfaces after cleaning.

Recommended method of preparation is to grit blast with 24 mesh aluminum oxide, rough grind, or rough machine in a lathe.

### **SPRAY PARAMETERS:**

Air Pressure:	*50 - 60 psi
Voltage:	*20 - 21
Amperage:	*100 - 300
Standoff:	*3 - 10 in.

\* Parameters are typical and may vary depending on the equipment used. Contact your equipment manufacturer for optimum spray parameters.

#### **AVAILABILITY:**

2.3mm, 3.2mm (1/8') and 4.8mm (3/16") diameter wire available on spools or in drums.

# **HEALTH & SAFETY:**

To insure a safe work environment observe normal spraying practices, provide appropriate respiratory protection and pay attention to air flow patterns. For general spray practices, see AWS "Safety and Health Fact Sheet No.20 -Thermal Spray Safety". Thermal spraying is a completely safe process when performed in accordance with proper safety measures. Become familiar with local safety regulations before starting spray operations.

DO NOT operate your spraying equipment or use the spray material supplied, before you have thoroughly read the equipment instruction manual.

Contact Eutectic for Material Safety Data Sheet (MSDS) information.

DISREGARDING THESE INSTRUCTIONS MAY BE HAZARDOUS TO YOUR HEALTH

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