



## TECHNICAL SPECIFICATION SHEET

J.W. HARRIS CO., INC.  
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# HARRIS WELCO 26 ALUMINUM ELECTRODE

WARNING: PROTECT yourself and others. Read and understand this information.

FUMES AND GASES can be hazardous to your health.

ARC RAYS can injure eyes and burn skin.

ELECTRIC SHOCK can KILL.

- Before use, read and understand the manufacturer's instructions, Material Safety Data Sheets (MSDSs), and your employer's safety practices.
- Keep your head out of fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases from your breathing zone and the general area.
- Wear correct eye, ear, and body protection.
- Do not touch live electrical parts.
- See American National Standard Z49.1, *Safety in Welding, Cutting, and Allied Processes*, published by the American Welding Society, 550 N.W. LeJeune Road, Miami, Florida 33126; OSHA Safety and Health Standards, available from the U.S. Government Office, Washington, DC 20402

### STATEMENT OF LIABILITY — DISCLAIMER

Any suggestion of product applications or results is given without representation or warranty, either expressed or implied. Without exception or limitation, there are no warranties of merchantability or of fitness for particular purpose or application. The user must fully evaluate every process and application in all aspects, including suitability, compliance with applicable law and non-infringement of the rights of others. J.W. Harris Co., Inc. and its affiliates shall have no liability in respect thereof.

### NOMINAL COMPOSITION:

Aluminum	BALANCE	Aluminum Fluoride	1-11 %
Magnesium	.05 % max.	Copper	.40 % max.
Manganese	.05 % max.	Lithium Fluoride	1-11 %
Silicon	1-11 %	Zinc	.10 % max.
Magnesium Fluoride	1-11 %	Iron	.80 % max.
Potassium Chloride	1-11%	Potassium Fluoride	2-12 %
Sodium Chloride	1-11%		

### PHYSICAL PROPERTIES:

Tensile Strength	34,000 psi	Color Match	Good
Electrical Conductivity	Good	Corrosion Resistance	Good

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All statements, information and data given are believed to be accurate and reliable but are presented without guarantee, warranty or responsibility of any kind, expressed or implied.

Additional information available at our web site:

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## WELDING PROCEDURES:

A silicon based aluminum electrode, which will produce strong porosity free welds without excessive spatter or fuming. Used in the joining of aluminum alloys such as sheets, plates, castings and extrusions with a thickness or 1/8" or more. Clean weld area. On heavy sections, the joints should be beveled to form a 60° to 75° Vee. Tack parts to maintain alignment. Preheat heavy sections to 500°F to flatten bead and reduce amount of amperage required. Use DC electrode positive, maintain short arc length with electrode tilted slightly in the direction of travel. Weave beads are not usually recommended. Since aluminum rods burn off faster than steel, a faster travel speed is necessary. Slag is easier to removed after a short cooling period. Remove all slag, and wire brush using a stainless steel brush before making additional passes. Allow part to cool slowly to 200°F and then remove flux residue with warm water and stiff brush. Additional cleaning may be done with a 10% sulfuric acid and hot water solution a wire brush. May also be used on torch applications.

## \*RECOMMENDED AMPERAGES (D.C. REVERSE POLARITY):

3/32" x 14" (2.4 mm x 350 mm)	50-85 amps
1/8" x 14" (3.2 mm x 350 mm)	80-135 amps
5/32" x 14" (4.0 mm x 350 mm)	100-165 amps

\* All parameters are suggested as basic guidelines and will vary depending on joint design, number of passes and other factors.

## SPECIFICATION COMPLIANCE : HARRIS WELCO Internal

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