



GJ-101AB

Agglomerated Aluminate-Basic

- EN ISO 14174: S A AB 1 67 AC H5
- AWS A5.17: F7A4-EM12K / F7P4-EM12K

Product description

Basic Information

- BASICITY: ~1.4
- GRAIN SIZE: 0.2 - 1.6 mm (10-60 mesh)
- DIFFUSIBLE HYDROGEN : ≤5 ml/100g (H5 Grade)
- DENSITY: 1.2g/cm³
- PACKAGING: 25 kg plastic valve bags, 500/1000 kg large bags

Application

- This is an agglomerated aluminate-basic welding flux specifically engineered for the pipeline industry and heavy structural steel. (这是一款专为管线工业和重型钢结构研发的烧结型铝酸盐碱性焊剂。)
- Perfectly suited for carbon steel and low-alloy steels, particularly X60–X70 grade pipeline steels. (完美适用于碳钢及低合金钢，特别是 X60-X70 级管线钢。)
- It supports both AC and DC power sources and performs exceptionally well in multi-layer welding, single-wire, and high-speed tandem (multi-wire) submerged arc welding. (支持交直流电源，在多层焊、单丝及高速多丝埋弧焊中表现优异。)
- Features highly stable arc, excellent self-peeling slag detachability (even in narrow grooves), and smooth weld bead appearance. (电弧极度稳定，脱渣性极佳（即使在窄坡口内也能自动脱渣），焊道成型美观。)

Main constituents

SiO ₂ +TiO ₂	CaO+MgO	Al ₂ O ₃ +MnO	CaF ₂
20-25	20-25	30-35	15-20



Submerged Arc Welding Flux

Wire electrodes used	Yield strength ≥MPa	Tensile strength ≥MPa	Elongation 8%≥%	Impact values ≥J (CVN)		
				+20℃	-20℃	-40℃
EM12K	475	570	32			185

NOTE:

- Before welding, the flux must be baked at a temperature of approximately 300-350℃ (572-662°F) for 2 hours to guarantee H5 diffusible hydrogen levels.
- Before welding, it is essential to remove impurities such as rust, scale, and primer from the surface of the base metal to obtain high-quality weld deposited metal.
- In the case of multi-layer welding, the backing weld for groove welding requires a small current and welding speed.
- Add new flux regularly to prevent flux defects and poor weld bead surface formation when reusing flux.

