

Al 7534 SC

Application: aluminium paste Al 7534 SC is designed to form a doped p+ layer for use with mono- and multicrystalline silicon p-type wafers. Special inorganic modifiers enables deep and uniform BSF with very good durability of the final layer. Al 7534 SC is applicable for combined firing with other metallization pastes and shows good compatibility with other Chimet products for solar cell metallization.

BENEFITS

- Stable electrical and mechanical performances for lay-down in a 1.2-1.6 g/cell range (6 inches sq. cells)
- Good efficiency
- High adhesion of fired layer
- Undergo water tests
- Smooth surface with no mottling
- Excellent printability
- Easy cleaning (hydrosoluble)

STANDARD TEST CONDITIONS

Printing: typical industrial parameters: 200 – 280 mesh stainless steel screen, emulsion 15 – 25 µm thickness. Snap off 1.6 –

2.0 mm, speed 180 – 300 mm/s, pressure 60 – 70 N

Drying: 2 min @ 200 – 200 – 230 °C

Firing: 1 – 6: 500-600-650-720-865-910 (setting); peak temperature 780 – 840 °C; belt 6400 – 7200 mm/min.

Table 1. TYPICAL PROPERTIES

Viscosity

40 – 60 Pa *s @ 10s⁻¹

Fineness of grind

< 20 µm

Conductivity

10 – 16 mΩ/□

Wet deposit (280 mesh)

5 – 7 mg/cm²

Viscosity test:

TA Discovery HR1 rheometer, cone SST ST 40mm, 4 deg smart-swap

SHELF LIFE

Min. 6 months when properly stored in tightly closed containers at room temperature (< 25°C).

RECOMMENDATION

Before use please stir paste gently (to avoid air entrapment) with a spatula for homogenisation (30'' to

1'). Best conditions are achieved when a jar rolling is adopted. Keep paste at room temperature for 12h before opening container.

DISCLAIMER

The data published in this document come from experiments carried out in our laboratories and performed in conditions believed to be the most commonly accepted by the industry. It is the end-user's responsibility to check whether this product can be efficiently used in his specific process and under his specific industrial conditions which Chimet can neither control nor foresee. Chimet makes no warranties expressed or implied arising from the product use. Chimet specifically disclaims any liability for consequential or incidental damages of any kinds, including lost profits.

This product is for professional use only. The users are supposed to be aware of health, safety and disposal procedures and recommendations. SDS can be downloaded from the Chimet website <http://sds.chimet.com/front/login>.