FUDAR

AgSnO₂ AgSnO₂In₂O₃	
Overview	AgSnO2/AgSnO2In2O3 is an environmentally friendly electrical contact material, has replaced AgCdO in many areas. AgSnO2/AgSnO2In2O3 has good resistance to burnout and anti-melting welding.
Application	Widely used in all kinds of contactors, relays, circuit breakers and switches.

Material Properties								
AgSnO₂								
Tips	1#AgSnO₂	8#AgSnO₂	9#AgSnO₂	44#AgSnO₂	49#AgSnO₂	47#AgSnO₂	54#AgSnO₂	64#AgSnO₂
SnO₂ Content (wt%)	10.0±1.0	12.0±1.0	12.0±1.0	15.0±1.0	10.0±1.0	12.0±1.0	12.0±1.0	14.0±1.0
Density (g/cm³)	≥9.85	≥9.70	≥9.70	≥9.50	≥9.85	≥9.70	≥9.70	≥9.60
Elec.Resistivity (μΩ·cm)	≤2.40	≤2.50	≤2.50	≤2.60	≤2.40	≤2.50	≤2.50	≤2.50
Hardness HV	≥60	≥65	≥75	≥70	≥60	≥60	≥60	≥60
Manufacturing Process	Pre-oxidation-Sintering-Extruding				Mixing-Sintering-Extruding			

AgSnO₂ In₂O₃					
Tips	15#AgSnO₂	16#AgSnO₂	17#AgSnO₂	41#AgSnO₂	56#AgSnO₂
Ag Content (wt%)	87.0±1.0	88.0±1.0	86.0±1.0	84.5±1.0	88.0±1.0
Density (g/cm³)	≥9.70	≥9.80	≥9.60	≥9.55	≥9.70
Elec.Resistivity (μΩ·cm)	≤3.50	≤3.40	≤3.50	≤3.50	≤2.50
Hardness HV	≥80	≥75	≥80	≥85	≥65
Manufacturing Process	Internal Oxidation				Pre-oxidation-Sintering-

AgSnO₂					
Wires	1#AgSnO₂	9#AgSnO₂	91#AgSnO₂	12#AgSnO₂	35#AgSnO₂
SnO₂ Content (wt%)	10±1	12±1	12±1	12±1	15±1
Density (g/cm³)	≥9.85	≥9.80	≥9.75	≥9.6	≥9.4
Elec.Resistivity (μΩ·cm)	≤2.25	≤2.30	≤2.20	≤2.40	≤2.55
Hardness HV	≥75	≥75	≥70	≥50	≥65
Tensile Strength (MPa)	≥260	≥260	≥245	≥210	≥210
Elongation (%)	≥10	≥8	≥10	≥8	≥8
Manufacturing Process	Pre-oxidation-Sintering-Extruding		Mixing-Sintering-Extruding		

AgSnO₂ In₂O₃					
Wires	3#AgSnO₂	5#AgSnO₂	2#AgSnO₂	51#AgSnO₂	88#AgSnO₂
Ag Content (wt%)	90±1	88±1	92±1	88±1	85.5±1
Density (g/cm³)	≥9.80	≥9.75	≥9.95	≥9.80	≥9.65
Elec.Resistivity (μΩ·cm)	≤2.45	≤2.60	≤2.30	≤2.50	≤2.6
Hardness HV	≥90	≥100	≥85	≥105	≥95
Tensile Strength (MPa)	≥300	≥310	≥270	≥340	≥300
Elongation (%)	≥10	≥10	≥15	≥10	≥10
Manufacturing Process	Pre-oxidation-Sintering-Extruding		Internal Oxidation		

Product Types								
	AgSnO₂				AgSnO₂In₂O₃			
SnO₂ Content (wt%)	10.0±1.0	12.0±1.0	14.0±1.0	15.0±1.0	6.0±1.0	8.0±1.0	9.0±1.0	10.0±1.0
Wires	√	√		√		√		√
Strips	√	√	√	√	√	√		
Tips	√	√	√	√	√	√	√	√
Bimetal Strips	√	√	√	√				
Rivets	√	√	√	√	√	√		