

Material Datasheet

Synaptite Grade 2

Material description

eForged molybdenum based, tungsten-free composite material for use as a replacement for materials of the ISO 5182:2016 Group B Type 13-14 and RWMA Group B Class 13-14.

This material shows a good conductivity/hardness ratio with reduced chemical interaction when welding pure copper and its alloys.

Physical characteristics at 20°C

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Mass density [g cm ⁻³]	9.5 ±0.1
Hardness HV1	450 ±10
Electrical conductivity [†] [%IACS] [MS·m ⁻¹]	15 ±1 9.0 ±0.5

[†]measured by phase-sensitive eddy current test method (DIN EN 2004-1)

Forms Available

Sizes [‡]		
Circular blanks	Diameter from Ø5 to Ø28mm	Height 1 to 15mm
Square blanks	Section from 3x3mm to 25x25mm	
Rectangular blanks	Variable section from 5x3mm to 45x15mm	

[‡]Semi-finished machined products and specific sizes available on request

Machinability and soldering

These materials can be machined with conventional carbide cutting tools.
Solders used for RWMA Group B are recommended.

Health and Safety

No substances classified under the Annex XVII to REACH are used in this group of materials. Cobalt, Chromium, Nickel, and Beryllium free.