

Cold Rolled Strip



Description, standards & chemical

IMPHY DILVER[®] is an iron-nickel-cobalt alloy with a CTE matched to borosilicate glass and ceramics. Typical applications are hybrid circuit casings, transistor and optoelectronic component cases and bases, electronic tubes (power, X rays...), hermetic feedthroughs, SAW filters and oscillator housings.

International standards

ASTM F15 - DIN 17745 - W 1.3981 - A 54-301 - SEW 38

Chemical composition (% weight)

	Ni	Co	Fe
Typical value	29	17	Bal

Standard Delivery & dimensions available

Form	Thickness	Width	Length	Temper
Strip - Sheet	0.10 to 3.50 mm	10 to 640 mm	500 to 3500 mm	Annealed / Hard

Physical properties

Density (g/cm ³)	Resistivity at 20°C (μohm.cm)	Melting T° (°C)	Curie T° (°C)	Specific heat (J/g °C)	Thermal conductivity at 20° (W/m/°C)
8.25	49	1450	425	0.50	17.5

	30 to 400°C	30 to 450°C
Average linear CTE (10-6/°C)	4.60 to 5.20	5.10 to 5.50

Mechanical properties (Typical values)

Temper	Hardness Hv	Ultimate strength (MPa)	Yield strength (MPa)	Elongation %	Young modulus KN/mm ²
Annealed	160	540	380	30	139
Hard	220	700	680	9	

The data enclosed in this document are only given as indicative values and correspond to our standard product. Different specific requirements are subject to discussion and formal approval by Aperam Alloys Imphy. For further information or special request, please contact us.

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