

### DATA SHEET

## BELMONT INDIUM METAL

### Typical End Uses

Belmont elemental indium, available in commercial grade or high purity, is a crystalline solid suitable for use in the alloying with lead, aluminum, and beryllium-copper to improve hardness and strength, and in the alloying of other metals to improve corrosion resistance, or fluidity in the molten state. Other applications include atomic reactor control rods, batteries, bearings, brazing compounds, chemicals, dental alloys, semiconductor components, gasoline, rectifiers, reflector coatings, and solder seals.

### Chemical Composition

Belmont has two grades of indium, commercial grade that is 99.9% indium, and a high purity grade that is 99.99% indium.

### Forms and Sizes Available

Belmont elemental indium is available in various sizes as bar, ingot, rod, shot, wire, and special shapes.

## BELMONT INDIUM ALLOYS

Belmont indium alloys feature indium base solders and indium base low melting alloys. Standard and special compositions, including combinations, are available for:

Indium – Bismuth    Indium – Cadmium    Indium – Lead    Indium – Tin

### Mechanical Properties

Tensile strength:	380 psi; 2.62 MPa
Compressive strength:	2.14 MPa
Hardness:	0.9, 0.9HBB
Elongation:	22% in 1"
Modulus of elasticity:	1,570,000 psi
Elastic modulus:	tension, 10.8GPa

### Physical Properties

Melting point:	156.6° C (314°F)
Boiling point:	2,073° C (3,763°F)
Density:	7.31 g/cm <sup>3</sup> (0.264 lb./in <sup>3</sup> ) at 20° C (68° F)
Linear coefficient of thermal expansion:	0.000033" per °C
Volume change on solidification:	2.5% contraction

### Note

The information contained in this data sheet is the most accurate in our possession at the time of publication, and is based on our effort to meet accepted industry references, standards, and specifications. However, Belmont cannot assume responsibility for in-service performance of these products due to our lack of control over, or supervision of, their use.

Belmont: The Non Ferrous Specialists  
For maximum variety in non ferrous metals, alloys, formulations, and shapes.  
Custom shapes and compositions available.