CAGroup INDUSTRIAL SOLUTIONS



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Fusible Alloys

Product

Fusible alloys are used for a variety of purposes in industry today.
They are mostly based on Bismuth between 40 & 60% and expand slightly on solidification; many of these alloys employ these unusual characteristics to particular advantage.

General

Elements commonly used with Bismuth are Tin, Antimony, Indium, Cadmium and Lead.

Temperature

Melting points of fusible alloys range from 47°C to 227°C. A number of eutectic alloys are included in this range.
The lower temperature alloys have particular advantages, as they can be used in conjunction with glass, ceramics, plastics, rubber, fibre and wood.

Alloys

Fusible alloys containing Indium have extremely low melting temperatures and wet most metals readily, as well as capably adhering to glass.

High Bismuth alloys have poor conductivity of heat and electricity. However many fusible alloys containing Bismuth and Antimony expands slightly on solidification.

Fusible alloys containing Indium and Cadmium are relatively soft (9 – 23 brinell hardness) however those containing Bismuth and Antimony are considerably harder.

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