## **Product Information Sheet**

**ISSUE** A

SUMMARY OF PROPERTIES

## ALLOY LG1

A. W. Fraser Alloy LG1 is a general purpose leaded gunmetal conforming to the requirements of B.S. 1400 - 1985 alloy LG1.

LG1 has excellent machining properties, and is not subject to dezincification (Category I alloy). It has reasonable corrosion resistance to seawater and brine, making it suitable for plumbing supplies, pump and low pressure valve components.

The composition of A. W. Fraser alloy LG1 is strictly controlled as are the casting conditions. LG1 products are manufactured using the latest continuous and centrifugal casting technology.

ALLOY LG1 - LEADED GUNMETAL (85-3-9-5)

## **Chemical Composition - percent** Element Nominal Tin Sn 2.0 - 3.53.0 Pb 4.0 - 6.0 5.5 Lead Zinc 7.0 - 9.59.0 Zn Nickel Ni 2.0 maximum Iron Fe 0.40 maximum Aluminium Al 0.01 maximum 0.25 maximum Antimony Sb Copper Cu Balance **Total Impurities** 1.0 maximum **Mechanical Properties Continuous Cast** Yield Strength (minimum) 80 Mpa (11,600 psi) Ultimate Tensile Strength (minimum) 180 Mpa (26,100 psi) Elongation 11% minimum **Typical Hardness** 65 BHN Specific Gravity 8.8 Machinability Rating (Free Machining Brass=100) 84 $230^{\circ}C (450^{\circ}F)$ Max. Operating Temperature $260^{\circ}C(500^{\circ}F)$ Stress Relieving Temperature Time at Temperature 1 hour per 25mm of section thickness **Comparative Specifications** AS1565 83810A; ASTM B505, B271 - 84400\* \* Similar but not identical;