

# Product Information Sheet

**ISSUE F**

## ALLOY 352

A W Fraser Ltd Alloy 352 is a dezincification-resistant leaded arsenical brass conforming to the requirements of A.S. 1567 alloy 352.

352 has been developed as a machining brass, which exhibits excellent resistance to dezincification in potable water systems making it suitable for plumbing fittings. Field trials have also shown it to be dezincification resistant in sea water when in the heat treated condition and is suitable for through-hull fittings.

The composition of A W Fraser Ltd alloy 352 is strictly controlled as are the extrusion, finishing and heat treatment operations to achieve a constant standard of quality, properties and structure. All extrusions are manufactured from continuous cast billet stock ensuring uniform dispersion of lead particles and freedom from porosity.

Batches of 352 extrusions are tested for dezincification resistance in accordance with A.S. 2345 –2016 or BS 2874.

Note: No heating operation exceeding 550°C should be undertaken on alloy 352 as this will reduce the dezincification resistance (eg silver soldering or brazing).

<b>ALLOY 352 - DEZINCIFICATION RESISTANT BRASS</b> <b>SUMMARY OF PROPERTIES</b>
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### Chemical Composition: Typical % (Permissible Range)

Element		
Copper	Cu	62.0 (59.5 – 64.0)
Lead	Pb	2.7 (0.5 – 3.5)
Arsenic	As	0.12 (0.02 – 0.25)
Zinc	Zn	Balance

Total Impurities 0.30 maximum

### Mechanical Properties [Typical]

Yield Strength  
 Ultimate Tensile Strength  
 Elongation  
 Typical Hardness  
 Specific Gravity  
 Machinability  
 Cold Working

### Drawn

190 MPa (28,000 psi)  
 380 MPa (55,000 psi)  
 30%  
 110 VPN  
 8.43  
 Good  
 Good

### Comparative Specifications

BS2874 - CZ132; UNS  
 C35330

