

H E A L T H A N D S A F E T Y D A T A S H E E T

<u>MATERIAL</u>	WHITE IRON CASTINGS (NICKEL CHROMIUM) eg (BS 4844) Part 2 or Comparable National or International Standards.		
<u>DESCRIPTION</u>	Silver grey metal castings predominantly of iron but containing moderate amounts of chromium and nickel.		
<u>TYPICAL COMPOSITION RANGE</u>	<u>%</u>	<u>TYPICAL PROPERTY RANGE</u>	
Total Carbon	: 2.4 - 3.6	Hardness	: 450-600 HB
Silicon	: 0.3 - 2.2	Melting Point Approx	: 1100°C
Manganese	: 0.2 - 0.8		
Nickel	: 3.0 - 6.0		
Chromium	: 1.5 - 10		
Molybdenum	: 0.5 max.		
Phosphorus	: 0.15 max.		
Sulphur	: 0.15 max.		

HEALTH HAZARDS

Nickel Chromium White Iron in its solid form is stable and not hazardous.

Dust from grinding operations will be predominately iron but nickel, chromium and small amounts of respirable quartz may be present even if the castings have been shot blasted. Dust from surface grinding should be extracted and/or approved respiratory protection be worn.

Welding generates iron oxide, nickel and chromium fume. Extraction should be provided and/or approved respiratory protection should be worn.

Eyes must be protected from stray metal particles when operations such as grinding or machining are carried out. Metal particles in the eyes will cause irritation and should be removed by trained personnel.

OCCUPATIONAL EXPOSURE LIMITS

Exposure limits for iron, iron oxide, nickel, chromium, and respirable quartz are given in the current edition of Health and Safety Executive Guidance Note EH40. "Occupational Exposure Limits". (Updated annually).

FIRE HAZARD

Nickel Chromium White Iron castings do not constitute a fire or explosive hazard.

MATERIAL HANDLING

No special precautions are necessary.

This data sheet is issued as a guidance document for health and safety purposes only.