Health and Safety Data Sheet - Premier cast iron Soil castings.

Material: Cast Iron Castings
Description: Metal castings manufactured from grey cast iron containing a minimum of 85% iron,

Typical Composition range

Total carbon	2.2 – 3.5	
Silicon	1.4 – 2.8	
Manganese	0.5 – 0.8	
Sulphur	0.06 – 0.15	
Phosphorous	0.1 – 1.2	
*molybdenum	0. – 1.0	* optional
*chromium	0. - 2.0	
Copper or nickel	0 - 2.0	
Iron		

Typical Property range

Tensile strength	150 – 250 N/mm ‡
Proof strength (0.1%)	98 – 165 N/mm ‡
Hardness	136 – 260 HB ‡
Melting point Approx	1150°c
Density	7.05 – 7.3 gm/cm

‡ Standard test piece results

Health Hazards

Grey Iron in its solid form is stable and not hazardous

If there is any drilling, cutting and or grinding of the casting, then it is recommended that personnel wear suitable gloves, eye protectors and a dust mask.
Dust from surface grinding should be extracted and/or approved respiratory protection should be worn.

Occupational exposure limits

Exposure limits for iron oxide, fume (as Fe) and respirable quartz, are given in EH40/2005, Table 1: List of approved workplace exposure limits (as consolidated with amendments October 2007).

Fire Hazard(s)

Grey Iron in its solid form is stable and does not constitute a fire or explosion hazard.
Painted products - In a fire, hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide and oxides of nitrogen may be produced.

Material handling

Cast iron is a heavy material and supplies / products need to be assessed on receipt, and appropriate mechanical and manual handling techniques employed, to avoid personnel being subjected to lifting or moving excessive weight. Care needs to be taken when handling, to avoid potential trap and crush injuries.
We recommend gloves are worn when handling cast iron products.

This data sheet is issued as a guidance document for health and safety purposes only. The information required for this MSDS is obtained from sources which we believe to be reliable.

O1422 330607 – Fax 01422 320349
Hargreaves Foundry Drainage Ltd, Water Lane, Halifax HX3 9HG