

Mastics and Mouldables

The FCS range of fibre and non-fibre mastics and mouldables are pre-mixed blends of different types of fibres and organic and inorganic water based binders.

The various grades consist of body soluble, Refractory Ceramic and high purity Alumina Fibre types. Temperature ranges from 1100°C - 1600°C and are suited to a wide range of applications.

All FCS mastics have excellent thermal shock resistance, good chemical resistance, good chemical stability and excellent insulation properties.

Hot gas erosion properties are also good but can be increased by adjusting the binder/fibre configuration.

The various types of mastics can be installed by means of pointing, hand placed, trowelling, pumping and caulking by means of a basic sealant gun. The mastics have a sticky, soft putty like appearance and are ideal for filling cracks/voids and hard to reach areas.

The mastics are available in various adaptable grades thus allowing the various installation techniques to be applied i.e. smooth/fluidic for pumping or stiff/sticky for hand placing into larger voids.



The mastics are manufactured in five different varieties and are supplied in 400ml and 1000ml cartridges or 5, 10 and 20ltr containers. The versatility of FCS mastics mean that they can be used for many different applications and mixed to specific customer requirements.

FCS mastics can be cured at non-critical temperatures, however full strength is reached at elevated temperatures in excess of 150/200°C.

As well as general mastics, FCS also supply a full range of LD mouldables for use in the glass and non-ferrous metals industries. These mouldables can be supplied as a stiff, non-sticky or sticky mass.



Data Sheet

Properties	BSI I	BSB I I	BSI2	RCI2	RCI4	SAI6
Colour	White	White	White	White	White	White
Appearance	Sticky Paste	Sticky Paste	Sticky Paste	Sticky Paste	Sticky Paste	Sticky Paste
Temperature	1100°C	1100°C	1200°C	1250°C	1400°C	1600°C
Wet Density	1000/1075 kg/m ³	1000/1075 kg/m ³	1000/1075 kg/m ³	1000/1075 kg/m ³	1000/1075 kg/m ³	1000/1075 kg/m ³
Dry Density	220/300 kg/m ³	150/175 kg/m ³	220/300 kg/m ³	220/300 kg/m ³	220/300 kg/m ³	220/300 kg/m ³
Shrinkage	low <5-8%	10-15%	low <5-8%	low <5-8%	low <5-8%	low <5-8%
Solids % Weight	20-25%	20-25%	20-25%	25%	25%	25%
Moisture % Weight	75-80%	75-80%	75-80%	75%	75%	75%
Coloidal Solution	62-70%	34-54%	62-70%	62-70%	62-70%	62-70%
Activator	-	30%	-	-	-	-
Binders	6%	6%	6%	6%	6%	6%

Fibre Chemical Composition

Al ₂ O ₃	<1.0	<1.0	-	42-47%	28-32%	95-97%
SiO ₂	61-67%	61-67%	72-77%	53-58%	52-56%	3-5%
ZrO ₂	-	-	-	-	14-18%	-
MgO	2.5-6.5%	2.5-6.5%	19-26%	-	-	-
CaO	27-33%	27-33%	-	-	-	-
Trace Elements	0-5%	0-5%	0-4%	0-5%	0-5%	<0.8%

Packaging

400ml Cartridge	•	•	•	•	•	•
1000ml Cartridge	•	•	•	•	•	•
5kg Container	•	•	•	•	•	•
10kg	•	•	•	•	•	•
20kg Container	•	•	•	•	•	•
Shelf Life (unopened)	1-3 Months	1-3 Months	1-3 Months	3-6 Months	3-6 Months	3-6 Months

Refer to FCS MSDS sheets for recommended handling and usage.

Quality and Innovation