



A.B.N. 37 004 377 155

www.amcol.com

50 Crowle Street, North Geelong, VIC 3215
PO Box 380, North Geelong, VIC 3215
Tel: +61 3 5278 2555

94 Balham Rd, Archerfield, QLD 4108
PO Box 87, Archerfield, QLD 4108
Tel: +61 7 3277 9563

PRODUCT CODE: 535
ISSUE DATE: June 2016

Technical Data Sheet

Page 1 of 2

VOLCLAY F90

A selected blend of Australian Bentonite with average particle size 60% passing 0.076mm

Functional use

Used in foundry industries to provide green compression strength so that accurate, dense stable moulds can be produced consistently from silica sand. High hot compression strength ensures mould stability and casting accuracy during and after pouring. High durability characteristics

Mineral composition

Hydrous aluminium silicate comprised principally of the clay mineral montmorillonite.

Chemical composition

Typical analysis (moisture free)

Oxide	wt. %	Oxide	wt. %
SiO ₂	67.72	MgO	2.27
Al ₂ O ₃	20.54	K ₂ O	1.15
Fe ₂ O ₃	3.52	CaO	0.64
Na ₂ O	2.96	TiO ₂	0.87
Cl	0.21	Cr ₂ O ₃	0.06
MnO	0.02	P ₂ O ₅	0.03
SO ₃	0.02	Total	100



A.B.N. 37 004 377 155

www.amcol.com

50 Crowle Street, North Geelong, VIC 3215
PO Box 380, North Geelong, VIC 3215
Tel: +61 3 5278 2555

94 Balham Rd, Archerfield, QLD 4108
PO Box 87, Archerfield, QLD 4108
Tel: +61 7 3277 9563

PRODUCT CODE: 535
ISSUE DATE: June 2016

Technical Data Sheet

Page 2 of 2

VOLCLAY F90

Typical physical properties

Bulk density	Approx. 0.9 tonnes/m ³
Swelling volume	Min 20 ml/2g
Moisture	Max 13%
pH	8 - 10
CEC	>80 meq/100g

Typical sand properties

Silica sand	95 parts by weight
Volclay F90	5 parts by weight
Moisture	2.5%
A.F.S. Green Compression	5 – 7 N/cm ²
A.F.S. Dry Compression	40 – 90 N/cm ²
A.F.S. Shear Strength	1 – 2 N/cm ²

Packaging

Multi-wall paper bags 25 kg, Bulker Bags & Bulk Tankers