

Specification Number: MF-617
Date : December 3, 2013
Revision Status : 1

Zirconium Silicate Flour MF-617

Product Name	Zirconium Silicate Flour
Molecular Formula	ZrSiO ₄
Molecular Weight	183.26
CAS Number	14940-68-2
Available Form	Powder
Major Applications	Precision Casting

STANDARD SPECIFICATION

PARAMETER	SPECIFICATION	TEST METHOD NUMBER
Purity Content (as ZrO ₂ + HfO ₂) (%)	65.0 (Min)	XRF-1301
Fe ₂ O ₃ (%) : XRF	0.2 (Max)	XRF-1301
: Volumetri	0.1 (Max)	MSZ-1303
TiO ₂ (%) : XRF	0.3 (Max)	XRF-1301
: Volumetri	0.15 (Max)	MSZ-1304
Al ₂ O ₃ (%)	1.0 (Max)	MSZ-1207
SiO ₂ (%)	31.2 (Max)	MSZ-1208
Thorium* (ppm)	200 (Max)	Radiometry
Uranium* (ppm)	350 (Max)	Radiometry

PHYSICAL PROPERTIES

PARAMETER	VALUE
Heat expansion index (cm/cm ^o C)	4.2 x 10 ⁻⁶
Heat transfer properties (BTU/sq.ft/hr. °F/in)	14.5
Refractive index	2
Heat Stability (°C)	1700
200 - 325 mesh (%)	4 - 4.5
Particle Distribution through 500 Mesh (%)	65-73
Particle Distribution D50 (Malvern) (µm)	16 ± 2
Thorium* (ppm)	200
Uranium* (ppm)	300
Surface Area (m ² /gm)	1.2

The technical data, specifications, items stated herewith are for customer's reference and are based on our most reliable data obtained by our company. They are made without any warranty implicitly or explicitly. Customer are advised to make own careful examination.