



Simulant Name: LMS-1 Lunar Mare Simulant

Simulant Type: General Purpose

Reference Material: High Ti Mare Soil

Publication: N/A

Bulk Density: 1.56 g/cm³

Particle Size Range: 0-1 mm



Mineralogy

Weight percent, as mixed.

Pyroxene	32.8
Basaltic glass	24.5
Plagioclase	19.8
Olivine	11.1
Basalt	7.5
Ilmenite	4.3

Reflectance Spectrum

Data coming soon.

Bulk Chemistry

Weight percent, as measured by XRF.

SiO ₂	42.81	MnO	0.15
TiO ₂	4.62	CaO	5.94
Al ₂ O ₃	14.13	Na ₂ O	4.92
Cr ₂ O ₃	0.21	K ₂ O	0.57
FeO _T	7.87	SO ₃	0.11
MgO	18.89	Total	99.56

Particle Size Distribution

Data coming soon.