



Simulant Name: LMS-1 Lunar Mare Simulant

Simulant Type: General Purpose

Reference Material: High Ti Mare Soil

Bulk Density: 1.56 g/cm³

Particle Size Range: 0-1 mm

Mean Particle Size: 63 microns



Mineralogy

Weight percent, as mixed.

Pyroxene	32.8
Glass	24.5
Plagioclase	19.8
Olivine	11.1
Basalt	7.5
Ilmenite	4.3

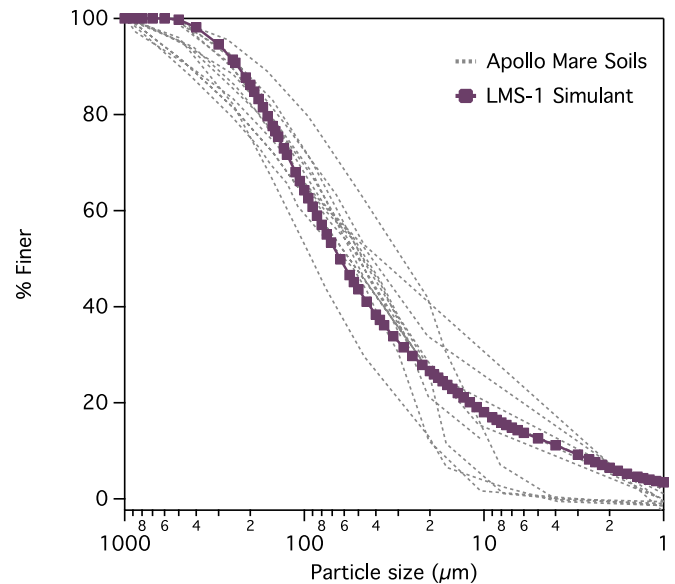
Bulk Chemistry

Weight percent, as measured by XRF.

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

Particle Size Distribution

Apollo data has been adjusted to remove the >1 mm fraction.



Reflectance Spectrum

Data coming soon.

Safety Information

See SDS for details. Primary hazard is dust inhalation; wear a respirator in dusty conditions.