

Simulant Name: LHS-1D Dust Simulant
Simulant Type: Extra-fine lunar highlands simulant for dust studies
Reference Material: Average lunar highlands
Uncompressed Bulk Density:
Mean Particle Size: 7 μm
Median Particle Size: 5 μm
Particle Size Range: <0.04 – 35 μm



Mineralogy

As mixed.

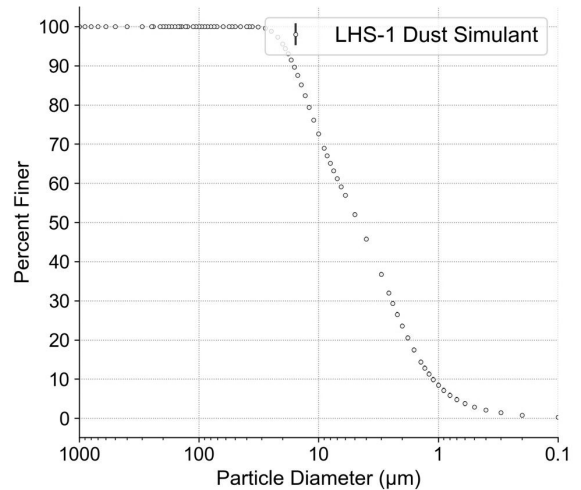
Component	Wt.%
Anorthosite	74.4
Glass-rich basalt	24.7
Ilmenite	0.4
Olivine	0.3
Pyroxene	0.2

Bulk Chemistry

Measured by XRF.

Oxide	Wt.%
SiO ₂	48.1
Al ₂ O ₃	25.8
CaO	18.4
Fe ₂ O ₃	3.7
K ₂ O	0.7
MgO	0.3
MnO	0.1
P ₂ O ₅	1.0
TiO ₂	1.1
SO ₃	0.3
Cl	0.4
SrO	0.1
Total	99.9

Particle Size Distribution



FTIR Spectrum

In progress.

Safety

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