

**Simulant Name:** LHS-1 Lunar Highlands Simulant

**Simulant Type:** General Purpose

**Reference Material:** Generic Highlands Soil

**Bulk Density:** 1.30 g/cm<sup>3</sup>

**Particle Size Range:** 0-1 mm

**Mean Particle Size:** 94 microns



## Mineralogy

Weight percent, as mixed.

Plagioclase	74.4
Glass	24.2
Basalt	0.5
Ilmenite	0.4
Pyroxene	0.3
Olivine	0.2

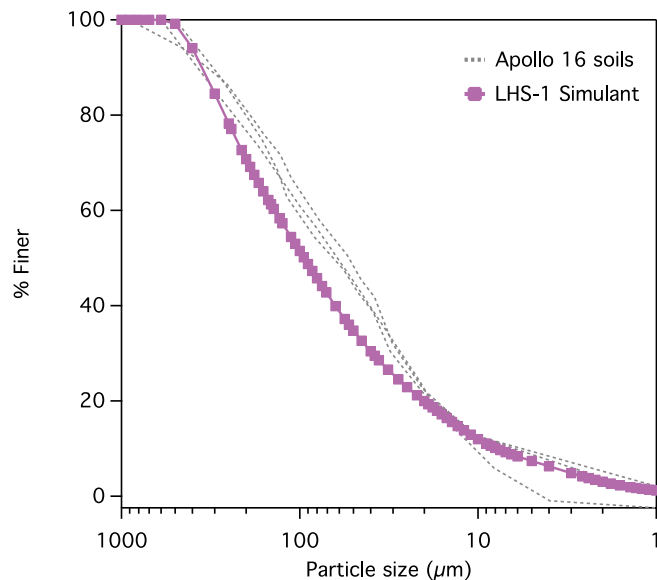
## Bulk Chemistry

Weight percent,  
as measured by XRF.

SiO <sub>2</sub>	44.18
TiO <sub>2</sub>	0.79
Al <sub>2</sub> O <sub>3</sub>	26.24
Cr <sub>2</sub> O <sub>3</sub>	0.02
FeO <sub>T</sub>	3.04
MgO	11.22
MnO	0.05
CaO	11.62
Na <sub>2</sub> O	2.30
K <sub>2</sub> O	0.46
SO <sub>3</sub>	0.10
<b>Total</b>	<b>100.0</b>

## 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.