

**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  $\mu\text{m}$   
**Median Particle Size:** 5  $\mu\text{m}$   
**Particle Size Range:** <0.04 – 35  $\mu\text{m}$



## Mineralogy

As mixed.

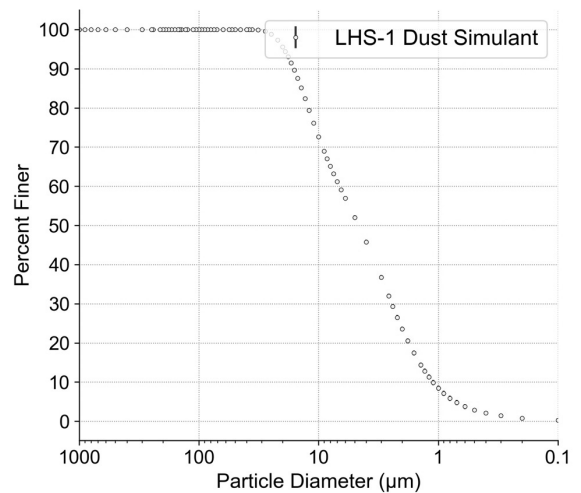
Component	Wt.%
Anorthosite	74.4
Glass-rich basalt	24.7
Ilmenite	0.4
Olivine	0.3
Pyroxene	0.2

## Bulk Chemistry

Measured by XRF.

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

## Particle Size Distribution



## Safety

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

## FTIR Spectrum

*In progress.*