



Simulant Name: MGS-1C Clay ISRU

Simulant Type: Water extraction applications

Reference Material: M-WIP Reference Case C

Publication: Cannon et al. 2018

Bulk Density: *Data coming soon*

Default Particle Size: 0-1 mm



Mineralogy

Weight percent, as mixed.

Smectite	40.0	Ferrihydrite	2.1
Plagioclase	16.4	Hydrated silica	1.8
Basaltic glass	13.7	Magnetite	1.1
Pyroxene	12.2	Anhydrite	1.0
Olivine	8.2	Fe-carbonate	0.8
Mg-sulfate	2.4	Hematite	0.3

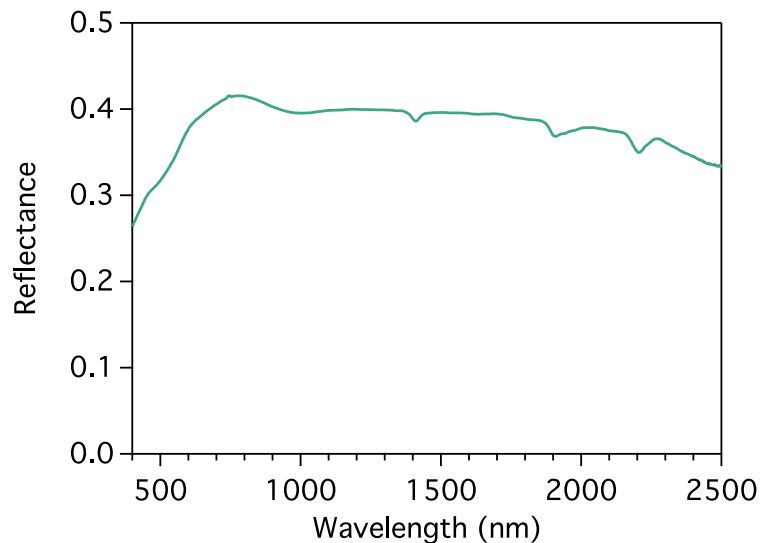
Bulk Chemistry

Weight percent, as measured by XRF.

SiO ₂	56.13	CaO	2.02
TiO ₂	0.21	Na ₂ O	1.91
Al ₂ O ₃	16.89	K ₂ O	0.47
Cr ₂ O ₃	0.02	P ₂ O ₅	0.35
FeO _T	8.24	SO ₃	1.16
MgO	12.57	MnO	0.04

Reflectance Spectrum

As measured on an ASD Fieldspec at 30° incidence and 0° emergence angles.



Volatile Release Pattern

Data coming soon

Safety Information

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