

Simulant Name: MGS-1S Sulfate ISRU
Simulant Type: Water extraction applications
Reference Material: M-WIP Reference Case B
Publication: Cannon et al. 2018
Bulk Density: *Data coming soon*
Default Particle Size: 0-1 mm



Mineralogy

Weight percent, as mixed.

Gypsum	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.

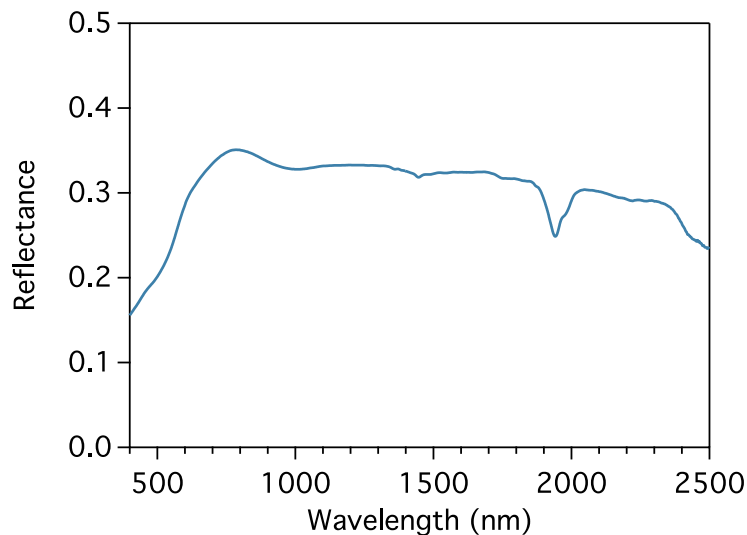
SiO ₂	29.29	CaO	14.81
TiO ₂	0.27	Na ₂ O	2.11
Al ₂ O ₃	6.37	K ₂ O	0.45
Cr ₂ O ₃	0.13	P ₂ O ₅	0.32
FeO _T	11.25	SO ₃	18.71
MgO	0.07	MnO	0.07

Safety Information

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

Reflectance Spectrum

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



Volatile Release Pattern

Data coming soon