

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: g/cm³
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

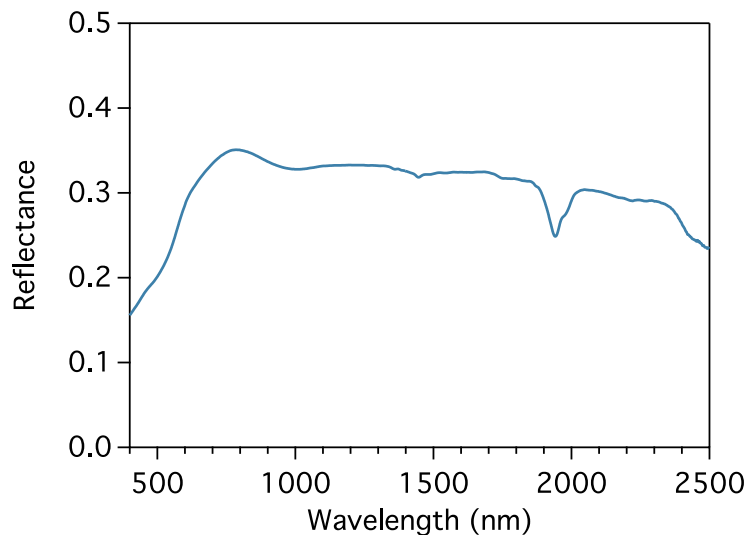
Bulk Chemistry

Data coming soon

SiO ₂		CaO	
TiO ₂		Na ₂ O	
Al ₂ O ₃		K ₂ O	
Cr ₂ O ₃		P ₂ O ₅	
FeO _T		SO ₃	
MgO		Total	

Reflectance Spectrum

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



Volatile Release Pattern

Data coming soon

Safety Information

MGS-1S contains no known carcinogens or toxic chemicals. Primary hazards are dust inhalation and skin irritation: always wear a mask and gloves when handling simulants.