



**MTS<sup>®</sup>-FS**  
METALS TREATMENT SOLUTION

### Benefits Include

Reduce Leachable concentrations of metals

Applicable in soil piles and in-situ applications for groundwater treatment

Economical solution compared to other available products

Soluble solutions available for better injection ROI

Biogeochemical reduction additive for BGCR product line

### Proven Field Applications

Excavation for Off-site disposal at reduced cost

Sustainable reuse onsite treatment of impacted soils

Direct Push Injection into groundwater zone

Slag and other metals residual treatment applications

Improved performance of solidification applications utilizing cement for more sustainable results



**C.E.R.E.S.**  
Remediation Products

## MTS-FeSO<sub>4</sub>

### Ferrous Sulfate Technical Data Sheet

Iron sulfate is available in different forms and modified to achieve specific redox reactions in soil and groundwater applications that result in the sequestration and reduction in dissolved heavy metals. CERES engineers the product to be either completely soluble or semi-soluble depending on site specific requirements and performance characteristics determined from site-specific data or treatability studies. Let CERES assist in your remediation design!

Iron Sulfate Options	Fe Content	Applications
Ultra-Fine Powder	34-36%	Groundwater Injection, high reactivity
Fine to Granular Powder	19-21%	Soil mixing or injection
Granulated Pellets	19-21%	Soil mixing, slow release
Liquid Iron Solution	10-15%	Groundwater Injection
Alkalinity Modification (Proprietary)		As needed for specific applications

Iron Sulfate Physical Properties	Density	Solubility
Ultra-Fine Powder	1.1-1.3 g/cm <sup>3</sup>	357 g/l
Fine to Granular Powder	1.1-1.3 g/cm <sup>3</sup>	290 g/l
Granulated Pellets	1.1-1.3 g/cm <sup>3</sup>	256 g/l
Liquid Iron Solution	1 g/cm <sup>3</sup>	NA
Color: light green to gray		
Hygroscopic: store in cool dry place		

### For In-Situ and Ex-Situ Remediation, Landfill, Mining, and Industrial Applications:

Each of the MTS<sup>®</sup> chemical products are proprietary and incorporate site-specific data to achieve site-specific engineered formulations for use in chemical sequestration, reduction, and immobilization of heavy metals. MTS<sup>®</sup> is commonly employed as a stand-alone remediation solution however may be combined with solidification methods under certain conditions or combined with other reagents for mixed plumes involving chlorinated solvents, PFOS-PFOA or other contaminants.

Technical design support, references, papers, and reliable customer service available to all customers.