



Certificate of Analysis

Ferrous Sulfate Heptahydrate ACS/USP/FCC

Catalog Number: FS1001
Lot Number: 1116703
Synonym(s): Iron (II) sulfate heptahydrate
CAS Number: 7782-63-0
Molecular Formula: $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$
Molecular Weight: 278.01
Storage: 15°C – 30°C
Date of Manufacture: August 22, 2017
Retest Date: August 21, 2020

Test	Specification	Result
Appearance	Green to bluish-green crystals	Conforms
Assay	99.5 – 104.5%	100.44%
Identification	To pass tests	Conforms
pH (5%)	3.0 – 4.0	3.41
Insoluble Matter	$\leq 0.01\%$	0.005%
Chloride	$\leq 0.001\%$	$< 0.001\%$
Phosphate	$\leq 0.001\%$	$< 0.001\%$
Calcium	$\leq 0.005\%$	0.0006%
Copper	$\leq 0.005\%$	0.0018%
Ferric (Fe^{3+})	$\leq 0.1\%$	$< 0.1\%$
Magnesium	$\leq 0.002\%$	0.0007%
Manganese	$\leq 0.05\%$	0.0228%
Potassium	$\leq 0.002\%$	0.0008%
Sodium	$\leq 0.02\%$	0.0015%
Zinc	$\leq 0.005\%$	0.0006%
Arsenic	$\leq 3\text{ppm}$	$< 3\text{ppm}$
Lead	$\leq 2\text{mg/kg}$	0.8mg/kg
Mercury	$\leq 1\mu\text{g/g}$	$< 1\mu\text{g/g}$
Residual Solvents: Water was the only solvent used during the manufacturing process.		

Approved by:

Date: November 16, 2017

John Grubb, PhD
Gojira Fine Chemicals, LLC
Quality Manager
Tel: 440-539-7033 Fax: 888-211-5523
john@gojirafc.com

For research purposes only. Not for drug or clinical use in humans or human food additive use.