

## Giles Chemical, a division of Premier Magnesia, LLC. 102 Commerce Street Waynesville, NC 28786 Phone: 828-452-4784 Fax: 828-452-4786 Tech Certificate of Analysis

Release Date:	3/4/2018				
CUSTOMER:					
CUST. REF:	Activated Charcoal & Hawaiian	SHIP DATE:			
PRODUCT:		TRAILER NUMBER:			
SHELF LIFE:	3 Years	BILL OF LADING #:_			
LOT NUMBER:	18063	PO NUMBER #:			
CARRIER:		MANUFACTURED:			
CUST. CONTACT:		EXPIRATION:			

I certify that this material meets all the requirements of the Giles Chemical sales specifications. Periodic testing has shown the samples to be consistently free of volatile organic impurities. Giles Chemical magnesium sulfate is manufactured under the guidelines of Current Good Manufacturing Practices (cGMP).

## 73% EPSOM SALT, Magnesium Sulfate - Heptahydrate, Tech Grade, 25% Salt TFC (Contains ≤ 1% Fragrance and may contain trace amounts of proprietary additives)

Epsom Salt			Salt, TFC (RI17220005)/RI17221002		
TEST	LOWER	UPPER	TEST RESULT	PARAMETERS RESULTS	
Appearance	~~	~~	Clear	Appearance	Clear Crystals
Limit of Chloride	~~	140 ppm	Pass	Calcium&Magnesium (as Calcium) 483 ppm	
Limit of Iron	~~	20 ppm	Pass	Calcium Sulfate	0.147%
Selenium	~~	30 ppm	Pass	Copper	0 ppm
Heavy Metals (as Pb)	~~	10 ppm	Pass	Iron - Free	0.1 ppm
pH (5% Solution)	5.0	9.2	Pass	Arsenic < 1.0 ppm	
Loss on Ignition	40.0	52.0	Pass	Heavy Metals (as Pb) < 2.0 ppn	
Assay, % MgSO4 (Dry Basis)	99.0	100.5	Pass	Sodium Chloride 99.82	
% MgSO4 (As is Basis)	47.52	60.3	Pass	Bulk Density	79.0 lb/ft3
ID, Magnesium, Sulfate	~~	~~	Present		

CONTACT:	ANALYST:

Quality Assurance Laboratory SIGNATURE ON FILE

Brent Lance - Chemist