



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: 7/5/2018
CUSTOMER :
CUST. REF: SHIP DATE:
PRODUCT: Activated Charcoal & Hawaiian Black Lava Salt TRAILER NUMBER:
SHELF LIFE: 3 Years BILL OF LADING #:
LOT NUMBER: 18186 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 \leq 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 ppm |
| Assay, % MgSO ₄ (Dry Basis) | 99.0 | 100.5 | Pass | Sodium Chloride | 99.82 |
| % MgSO ₄ (As is Basis) | 47.52 | 60.3 | Pass | Bulk Density | 79.0 lb/ft ³ |
| ID, Magnesium, Sulfate | ~~ | ~~ | Present | -- | -- |

CONTACT:

Quality Assurance Laboratory
Brent Lance - Chemist

ANALYST:

SIGNATURE ON FILE

