

CERTIFICATE OF ANALYSIS

| CUSTOMER | PRODUCT |
|----------|--------------------------------|
| | Sodium Metabisulfite NF/Food/P |

| ESSECO ORDER NUMBER: | 9667 | PRODUCT CODE: | INP04E-0050LB |
|----------------------|------------|----------------|---------------|
| CUSTOMER PO NUMBER: | 192408 | LOT NUMBER | 02545 |
| RELEASE NUMBER: | | SPECIFICATION: | Standard |
| PRINT DATE: | 11/29/2010 | VERSION: | 1.0 |
| EXPIRATION DATE: | 09/10/2013 | EFFECTIVE | 9/27/2004 |

| PARAMETER | SPECIFICATION | ANALYSIS |
|--------------------------------|--|----------|
| Sodium Metabisulfite (Na2S2O5) | 98.6 =< Value =< 99.8 | 99.3 % |
| Sodium Sulfite (Na2SO3) | 0.0 =< Value =< 0.6 | 0.3 % |
| pH (5% solution) | 4.0 =< Value =< 4.6 | 4.2 |
| Appearance of Solution | Clear and Free from Insoluble Matter Except for a Slight Flocculence | PASS |
| Appearance | White Crystals | PASS |
| Chloride (CI) | 0.00 <= Value <= 0.05 % | PASS |
| Heavy Metals (as Pb) | 0.0 <= Value <= 10.0 ppm | PASS |
| Identification | To Pass Test | PASS |
| Insoluble Matter (Ca,Mg,NH4OH) | 0.00 <= Value <= 0.05 % | PASS |
| Iron (Fe) | 0.0 <= Value <= 5.0 ppm | PASS |
| Lead (Pb) | 0.0 <= Value <= 0.5 ppm | PASS |
| React to Amm Silver Nitrate | To Pass Test | PASS |
| Sulfur Dioxide (SO2) | 66.4 <= Value <= 67.2 % | PASS |
| Selenium (Se) | 0.0 <= Value <= 5.0 ppm | PASS |
| On 40 Mesh | 0.0 <= Value <= 20.0 % | PASS |
| Through 100 Mesh | 0.0 <= Value <= 35.0 % | PASS |
| Through 20 Mesh | 99.0 <= Value <= 100.0 % | PASS |
| Sodium Thiosulfate (Na2S2O3) | 0.00 <= Value <= 0.04 % | PASS |

CERTIFIED BY:

Markotalk

AUTHORIZED SIGNATURE

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