



OptiMSM® Certificate of Analysis

SKU NUMBER: 20020 LOT NUMBER: 0900751 MFG DATE: 2/13/09 EXPIRATION DATE: 2/13/14

PRODUCT: METHYLSULFONYLMETHANE, (Dimethyl Sulfone, Methyl Sulfone, MSM)

MANUFACTURER: Bergstrom Nutrition, 1000 West 8th Street, Vancouver, WA 98660 – (360)693-1883 – Country of Origin: USA

OptiMSM manufactured by Bergstrom Nutrition is sold under license to all worldwide R.J. Herschler use patents.

EXCIPIENT: None QUANTITY: 0% by weight

PHYSICAL DESCRIPTION: White flake

CHEMICAL ABSTRACTS REGISTRY NUMBER: 67-71-0 MOLECULAR WEIGHT: 94.13 PERCENT SULFUR: 34.1%

PHYSICOCHEMICAL ANALYSIS	METHOD	SPECIFICATION	LOT RESULT
VOLATILE PURITY:	MSM – GC-FID ^{1,2}	>99.8%	99.9 %
MELTING POINT:	USP29/NF24 <741>	109.5°C ± 1.0°C	110.0 °C
WATER CONTENT:	USP29/NF24 <921a>	<0.1%	0.01 %
DMSO CONTENT:	MSM – GC-FID ^{1,2}	<0.05%	<0.05 %
PARTICLE SIZE: 12 ⁴	USP29/NF24 <786l>	NLT 98% THROUGH	95.5 %
BULK DENSITY:	USP29/NF24 <616l>	NLT 0.59 g/ml	0.72 g/ml
TAPPED DENSITY:	USP29/NF24 <616l>	NLT 0.75 g/ml	0.86 g/ml

MICROBIOLOGICAL ANALYSIS	METHOD	SPECIFICATION	LOT RESULT
Aerobic Plate Count:	AOAC 990.12 ^{2,3}	<10cfu/gm	<10 cfu/gm
Yeast/Mold:	AOAC 997.02 ^{2,3}	<10cfu/gm	<10 cfu/gm
Total Coliforms:	AOAC 991.14 ^{2,3}	<10cfu/gm	<10 cfu/gm

METALS ANALYSIS	METHOD	SPECIFICATION	LOT RESULT
Al (Aluminum):	EPA 200.8 - ICPMS ^{1,2}	<1.0 ppm	<1.0 ppm
As (Arsenic):	EPA 7080A - GFAA ^{1,2}	<0.010 ppm	<0.01 ppm
Cd (Cadmium):	EPA 200.8 - ICPMS ^{1,2}	<0.005 ppm	<0.005 ppm
Hg (Mercury):	EPA 7471A ^{1,2}	<0.001 ppm	<0.001 ppm
Pb (Lead):	EPA 200.8 - ICPMS ^{1,2}	<0.010 ppm	<0.01 ppm

- NOTE: 1. Third party laboratory validated method
 2. Additional third party validation method may be used in place of listed method.
 3. >10cfu/gm results will generate microbial ID test; E. Coli, Salmonella, Staphylococcus aureus, Pseudomonas aeruginosa
 4. U.S. Sieve Designation

Manufacturer Statement

The OptiMSM manufacturing facility is a CGMP (Good Manufacturing Practices) facility. Bergstrom Nutrition guarantees OptiMSM is non-GMO as defined by the European Union in Article 2.2 of Directive 2001/18/EC and Article 2.5 of Regulation (EC)1829/2003 and is in compliance with Regulation (EC) 1830/2003 regarding traceability and labeling of GMOs and food derived thereof. OptiMSM is kosher certified through the Orthodox Union and Halal certified by the Islamic Food and Nutrition Council of America.

Prepared By:
 Approved By:

Date: 2/11/09
 Date: 2/11/09