

OptiMSM® Certificate of Analysis

SKU NUMBERS: 20020

LOT NUMBER: 2006051

EXPIRATION DATE: 05/2025

PRODUCT: METHYLSULFONYLMETHANE, (Dimethyl Sulfone, Methyl Sulfone, MSM, DMSO₂)

Country of Origin: USA

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 %
ASSAY	MSM-GC/FID ¹	98.0 – 102.0%	100.6 %
IDENTITY	USP Method B	Pass	Pass
MELTING POINT:	USP/NF <741>	109.5°C ± 1.0°C	110.0 °C
WATER CONTENT:	USP/NF <921a>	< 0.1%	<0.1 %
DMSO CONTENT:	MSM – GC/FID ^{1, 2}	< 0.05%	<0.05 %
INDIVIDUAL IMPURITY	GC/FID ¹	NMT 0.05%	<0.05 %
PARTICLE SIZE: 12 ³	USP/NF <786I>	NLT 98% THROUGH	99.8 %
BULK DENSITY:	USP/NF <616I>	NLT 0.68 g/ml	0.70 g/ml
TAPPED DENSITY:	USP/NF <616I>	NLT 0.78 g/ml	0.83 g/ml
MICROBIOLOGICAL ANALYSIS	METHOD	SPECIFICATION	LOT RESULT
Total Aerobic Microbial Count:	USP<61>	<10cfu/g	<10 cfu/g
Total Yeast and Mold Counts:	USP<61>	<10cfu/g	<10 cfu/g
Enterobacteria:	USP<62>	Absent	Absent
Escherichia coli:	USP<62>	Absent	Absent
Salmonella:	USP<62>	Absent	Absent
Staphylococcus aureus:	USP<62>	Absent	Absent
METALS ANALYSIS	METHOD	SPECIFICATION	LOT RESULT
As (Arsenic):	EPA 200.8 - ICPMS ^{1, 2}	<0.01 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}	<0.01 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. U.S. Sieve Designation

Certifié conforme à l'analyse du fabricant