



## THIRD PARTY TESTING



As the world leader in MSM, Bergstrom Nutrition® takes every step to ensure the utmost in quality, purity, and safety. Our product specifications are the most stringent in the industry. Consistency is guaranteed by process control, monitored at every stage of production, and followed by extensive analyticals.

Each batch of Bergstrom Nutrition MSM is independently tested and validated. In addition, every lot of OptiMSM® is third-party tested for quantifiable lead, arsenic, cadmium, aluminum, mercury and microbials. To save our customers time and money, large lot sizes can be processed and tested at one time.

A dedicated Bergstrom Nutrition regulatory staff helps ensure our customers meet FDA requirements with their branded products. OptiMSM is compliant with California Prop 65, the Safe Drinking Water and Toxic Enforcement Act of 1986. And only OptiMSM is GRAS-designated, Kosher and Halal certified, and manufactured in a facility that is ISO 9001:2008 registered, and FSSC22000 certified.

### Rigorous Analyticals Verify Consistent Identity and Purity

#### Volatile Purity by HRGC

>99.8%

This is a highly specific quantitative method for determining the volatile purity of MSM. This method was developed with the process of manufacturing MSM in mind. It is more specific than HPLC (High Performance Liquid Chromatography).

#### Melting Point

109.5°C ± 1.0°C

Extremely pure compounds have a distinct melt point. Non-volatile impurities will cause a non-distinct melt point that may be higher or lower than the acceptable value. Liquid will form when performing a melt point of impure product, but some solid material will remain at the melt point temperature, producing a larger range.

#### Water Content

<0.1%

Water content by Karl Fischer Titration is preferred for MSM. Other methods such as loss on drying and using a moisture balance can give erroneous results, as some of the MSM may be driven off by heat, giving higher results than actual.

#### DMSO Content

<0.05%

Freedom from residual DMSO is verified by the HRGC method used for volatile purity. The HRGC method was developed with this in mind. When performing this test, a “spiked” sample is also run to verify that DMSO would be detected by this instrument.