

## Is MSM Natural or Synthetic?

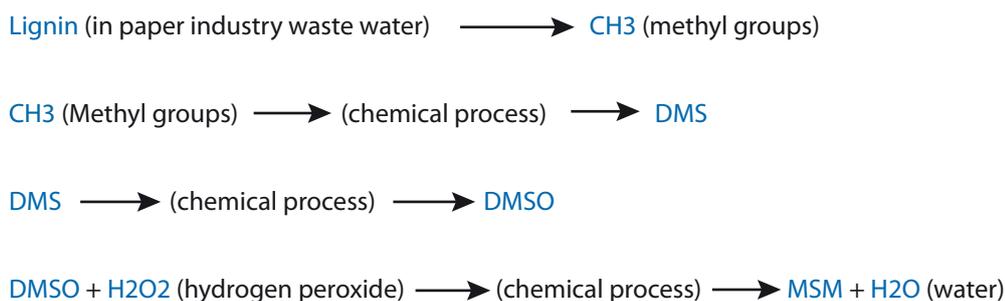
Many people puzzle about the source of OptiMSM: is it natural or synthetic? Is it organic? Some manufacturers claim their MSM is 'distilled directly from pine wood'. Another claim is, MSM would be of 'natural source'. Recently, we heard of a distributor claiming its MSM would be vegetarian, manufactured from vegetable oils such as flaxseed oil.

MSM is a naturally occurring substance found in the human body and many foods. The highest concentration of MSM in nature is in mammal's milk, but these sources contain MSM in parts per million.

It is practically impossible to distil MSM directly from pine wood, as we would have to cut down most of the pine forest to get a substantial amount of MSM. So this story is completely untrue, and any claim MSM would be 'organic', is false. Commercially available MSM does not come from wood, plants or fossil fuels. You cannot extract, isolate or grow MSM, a chemical reaction is required to make it.

US manufacturer Cardinal Nutrition (now: Bergstrom Nutrition) was the first to use paper industry waste water for the production of MSM. The compound lignin is separated from the waste water, and metabolised into DMS (dimethyl sulphide) by adding sulphur. After that, DMS is processed into DMSO and then MSM.

A summary of the production process looks as follows:



Question: how 'natural' can you call MSM when it is manufactured in this way? You cannot even call it 'semi-natural', as it has been produced completely synthetically through a number of production steps, starting with a 'natural' compound in paper industry waste water.

Looking at the productions process above, it would be misleading to say any MSM would be 'organic' or 'natural', even if paper industry waste water has been used as source of lignin. Basically, all MSM sold on the market today as a food supplement, has been manufactured synthetically.

A great concern has always been that waste water also contains a lot of other substances, including pollutants and impurities that you do not want to find back in your food supplement. For this reason, Bergstrom decided years ago to skip the waste water and start using DMS / DMSO obtained directly from the pharmaceutical industry. DMS and DMSO are very small and simple molecules that can easily be manufactured, and are identical to what Mother Nature produces.

All commercially available MSM is synthetic and created through a chemical reaction of DMSO and hydrogen peroxide. Since all commercial MSM produced comes from DMSO, and all commercial DMSO is produced synthetically, the origin of the DMSO is insignificant.

There is a misconception that one supply of MSM is more natural than another. All MSM produced for commercial use utilizes the same raw materials—but there is a difference, and that boils down to the purification process, testing levels, specifications and quality of the manufacturing.

Bergstrom Nutrition's focus on purity sets OptiMSM<sup>®</sup> apart. Bergstrom Nutrition pioneered the distillation process of MSM ensuring the highest levels of purity and safety. Chemical engineers and other experts recognize the multi-stage distillation process used to purify OptiMSM<sup>®</sup> as the superior method on the market. The end product is biomimetic which means the same as that found in nature.