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## **MOLYBDENUM DISULFIDE NANO- BASED LUBRICANT**



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#### **TECHNOLOGY READINESS LEVEL (TRL)**

TRL 4

#### **PATENT/ GRANTED NUMBER**

MY-169702-A

## ► TECHNOLOGY OVERVIEW

The present invention discloses a nanoparticle suspended lubricant that helps reduce costs, extended tool life and improve performance of machining process. Accordingly, the present invention provides a nano-based lubricant for use in machining comprising molybdenum disulphide (MoS2) nanoparticle and mineral oil wherein the nano-based lubricant is free from additive including phenol and chlorine, wherein the mineral oil has a concentration of 0.5% and wherein the molybdenum disulphide (MoS2) nanoparticle has a particle size ranging from 20 nm to 60 nm.



The molybdenum disulphide (MoS2) nanoparticle is mixed with mineral oil having 0.5% concentration by way of sonication method.

### **CONTACT US!**

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