

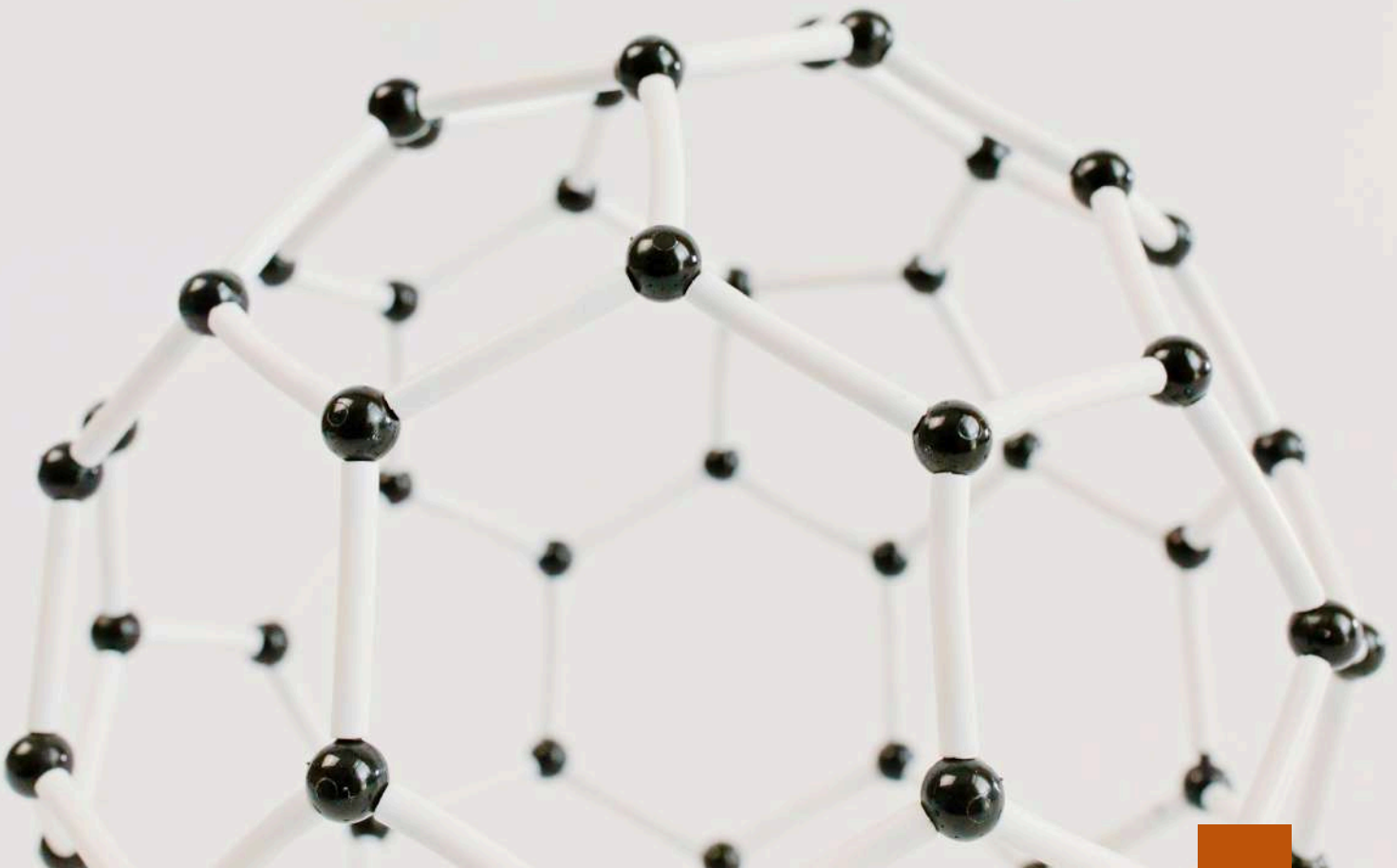


**HARDAI ARMND ENGINEERING SOLUTIONS**  
DESIGN IN INDIA



# MolyKul Coat

**MONO-COAT**



<https://hardaiarmnd.com>  
<https://molykul.com>

# We are 1st in India

With our premium MoS<sub>2</sub> Mono  
Layer Coating Dry lubrication  
products & Services



# Mono-Coat Components

Molybdenum Disulfide micro coating for dry lubrications (Service)



## MonoCoat Spin

### Description

MoS2 coated steel balls makes the spinning durable and heat free.

**Bearings, Ball Screw, Valve seat, LM guide, etc**



## MonoCoat LMG

### Description

MoS2 coating reduces risk of breakdown and ensures long term precision.

**LM guide block, Ball screw Nut, roller Screws, etc**



## MonoCoat BHP

### Description

MoS2 coating plays a vital role in improving durability in BHP of Engine.

**Piston rings, Piston pins, Piston skirt, Fasteners, rod, etc**



## MonoCoat MAKE

### Description

MoS2 ensures the durable fatigue cycle of the CNC machines and manufacturing machine parts.

**Tool Collets, Nuts, ATC gripper, fasteners, tools, etc**



## MonoCoat BN

### Description

MoS2 coating on fasteners ensures the locking of fasteners against thermal load loosening.

**Nuts, bolts, lock nuts, key ways, washers & fasteners**



## MonoCoat Hydro

### Description

MoS2 coating is the new shield for pumps and compressors against wear, corrosion, and dropping life.

**Swash plates, pumps and compressor components**



## MonoCoat CUT

### Description

MoS2 coating is highly efficient to improve tool life and ensure long term precision. [Under R&D]

**Milling tools, drilling tools and other cutting tools**



## MonoCoat AUX

### Description

MoS2 coating improves tribological aspects where compression and tensions are cyclic.

**Circlips, spacers, springs, pins, rings, waved washer, etc**



## MonoCoat XXX

### Description

Hardai ARMND welcome to all customization of MoS2 coating on different components.

**Customization**

# Molykul Mono-Coat

Doping Nanomaterials customizations with MoS<sub>2</sub> by Hardai ARMND



**Cu-MoS<sub>2</sub>**

### Applications

Manufacturing, Automotives, Vacuum, turbines, bearings, rollers

**Customization available**



**Sn-MoS<sub>2</sub>**

### Applications

Electronics, switches, connectors, sensors, thermostat, etc.

**Customization available**

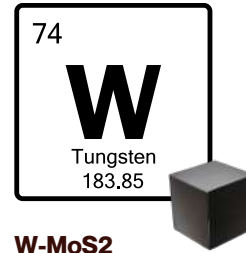


**Ti-MoS<sub>2</sub>**

### Applications

Automotives, Aerospace, Manufacturing, High speed bearings

**Customization available**

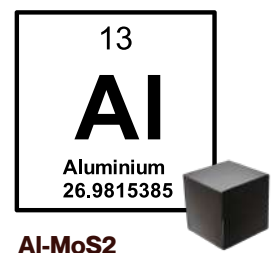


**W-MoS<sub>2</sub>**

### Applications

Engine, Mold and dies, cutting tools, Chain & Pulley, gears, bearings.

**Customization available**



**Al-MoS<sub>2</sub>**

### Applications

Aerospace, Defense, Biomedical, Automotives, Environment

**Customization available**



**Cr-MoS<sub>2</sub>**

### Applications

Biomedical, Heathcare equipments, Aerospace, Manufacturing

**Customization available**

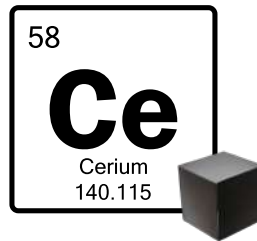


**Si-MoS<sub>2</sub>**

### Applications

Biomedical, Healthcare equipments, Electronics, Automotives

**Customization available**



**Ce-MoS<sub>2</sub>**

### Applications

Aerospace, Pollution control, High speed bearings.

**Customization available**



**Zn-MoS<sub>2</sub>**

### Applications

Gear box, Heavy Duty, Engines, Brakes, Cutting tools, electrical actuators

**Customization available**



**Mn-MoS<sub>2</sub>**

### Applications

Jet Engines, High Temperature Applications

**Customization available**

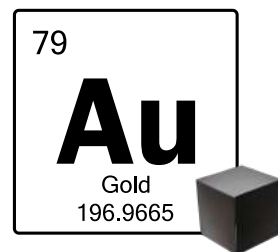


**Sb-MoS<sub>2</sub>**

### Applications

Heavy Duty, cyclic load, Micro Movements, manufacturing

**Customization available**



**Au-MoS<sub>2</sub>**

### Applications

Electro-Mechanical actuators, Aerospace

**Customization available**



**Ag-MoS<sub>2</sub>**

### Applications

Aerospace, satallite, Bearings, gears.

**Customization available**

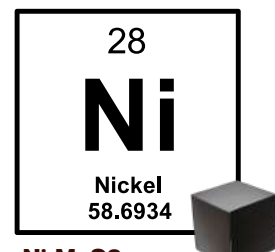


**Sm-MoS<sub>2</sub>**

### Applications

Aerospace, automotives, Manufacturing

**Customization available**



**Ni-MoS<sub>2</sub>**

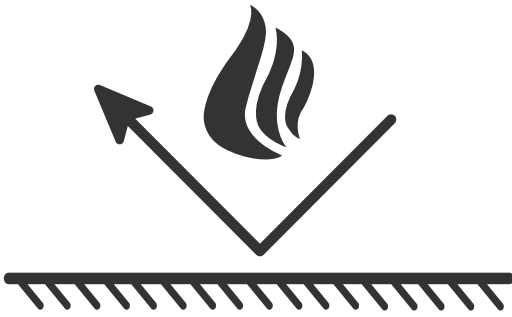
### Applications

Thermal Insulations, pumps & compressors, automotives, Aerospace

**Customization available**

# Molykul properties

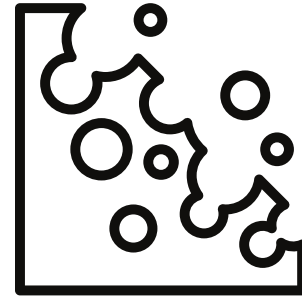
Core properties of MolyKul Mono-Coat



## Wide Temperature Range

### Description

MoS<sub>2</sub> Nano material with high-temperature capacity exhibits exceptional heat resistance, maintaining its lubricating properties even under extreme temperatures.



## Anti-Corrosion

### Description

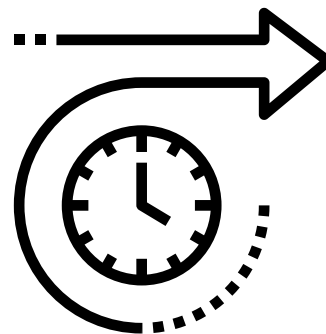
MoS<sub>2</sub> Nano material as an anti-contaminant demonstrates impressive corrosion resistance, safeguarding surfaces against degradation even in harsh environments.



## Eco-Friendly

### Description

MoS<sub>2</sub> Nano material is environmentally friendly, as it is free from harmful chemicals and compounds. Its use reduces the need for traditional lubricants.



## Highly durable

### Description

MoS<sub>2</sub> Nano material prolongs the lifespan of machinery and components by reducing friction and wear. Its durable nature ensures long-lasting protection against mechanical stress.

# MolyKul Specs

Technical Specifications of MolyKul Mono-Coat

**MolyKul Mono-Coat, a MoS<sub>2</sub>-based coating from Hardai ARMND, enhances rotating and linear motion parts by:**

- \* Reducing friction and wear through its low-friction interface
- \* Enhancing efficiency by minimizing metal-to-metal contact
- \* Providing lubrication and corrosion resistance
- \* Extending component life and reducing maintenance costs
- \* Offering versatility for high-load, high-speed, and harsh environments
- \* Improving performance in bearings, LM guides, pumps, and other applications

<b>Density of MoS<sub>2</sub></b>	<b>4.9 g/cc</b>
<b>Melting point</b>	<b>2300°C</b>
<b>Min. Particle size</b>	<b>10 nano meter</b>
<b>Storage requirement</b>	<b>Dust free packing</b>
<b>Human consumption</b>	<b>Hazardous</b>

<b>Min. Coating Thickness</b>	<b>1 micro meter</b>
<b>Coating Colour</b>	<b>Blackish</b>
<b>Endurance life of component</b>	<b>40% +</b>
<b>Dopping Components</b>	<b>As per application</b>
<b>Standards</b>	<b>AMS2526, ASTM G99 AMS 3084</b>



## Contact

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