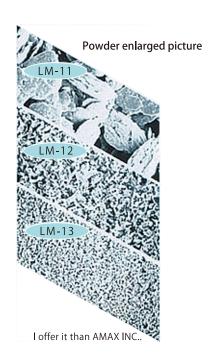
Molybdenum Disulfide Powder

Molybdenum disulfide is grayish black mineral composed of one molybdenum atom (Mo) and two sulfur atoms (S) in layers through the natural sulfurization of metal molybdenum underground.

MoS₂ molecule is extremely small of 6.26 Å, whose particle (0.4 μ m) has multiple layers (600-700 molecule layers). These layers are easy to be come off and each of them has a strong bond, which make the characteristics of lubricant agent.

MoS₂ molecule is extremely small of 6.26 Å, whose particle (0.4 μ m) has multiple layers (600-700 molecule layers). These layers are easy to be come off and each of them has a strong bond, which make the characteristics of lubricant agent.



Powder

Product Numbder	LM-11	LM-12	LM-13
Product Name	Z powder	NeO Z powder	SM powder
A	Purity:98.2% and over	Purity:98.0% and over	Purity:98.0% and over
Attribute	Average particle size: $3-4 \mu$ m	Average particle size: 0.7 μ m	Average particle size: 0.4 μ m
	pH value:7.0	pH value:6.0	pH value:5.3
PV value(MPa·m/sec)	92		
Heat resitance (℃)	-180 ∼ 450°C (+1,100 °C in inert gas)		
Pressure resistance load(MPa)	2,842		
Friction coefficient (μ)	0.03		
Major use	1. Addition to oil, grease, etc. 2. Compound to plastic, various rubbers, etc. 3. Addition to sintered metals and carbons 4. Lubrication in the ultra cold temperature and ultra high vacuum condition		

How to measure particle size

[Fisher No.]

This is the most common method to use the gap between particles for measurement. Powder has a gap between particles, and the gap remains after compressing powder. If particles of various sizes are distributed to fill the gap, the total volume of the gap will become reduced in size. Therefore you can guess the distribution of particles of various sizes by measuring the gap. This is the method to calculate the average particle size by compressing powder, blowing air at a constant pressure and reading out the pressure drop to make out the ventilation rate (porosity = rate of gap volume). As it considers the particle shape, this method is effective to any powder whose shape is not sphere.

[Microtrac]

This is the method to use the laser diffraction. By lasering particles and reading the scattered light intensity, it calculates the particle size and the particle size distribution. As each particle has a different shape, its size is statistically decided by measuring a lot of particles with the same method, converting various sizes of particles into sphere. This method is a mainstream of measuring the particle size and is very effective to measure the particle size distribution.