

MOLYSULFIDE®
Technical Grade, Technical Fine Grade
Super Fine Grade

DESCRIPTION

Molysulfide® is a lubricant grade of molybdenum disulfide (MoS₂) available in three grades – Technical, Technical Fine, and Super Fine. Typical MoS₂ content (calculated average) is 98%.

SPECIFICATIONS

	% by wt		
	Technical	Technical Fine	Super Fine
Acid Insoluble	0.50	0.50	0.50
Iron	0.25	0.25	0.25
Molybdenum Trioxide	0.05	0.05	0.15
Water	0.02	0.05	0.15
Oil	0.05	0.40	0.40
Carbon	1.50	1.50	1.50
Acid Number**	0.05	0.25	3.0

** Acid number is determined at time of production. Prolonged storage will result in slight oxidation, which will produce an increase in acid number. The smaller particle size grades are more susceptible to surface oxidation. Acid number is expressed as an absolute value and is the mg of KOH required to neutralize the acid in a one-gram sample.

Typical Particle Size and Bulk Density

Molysulfide® Grade	Fisher Number, µm	Particle Size Range by SEM, µm	Median Particle Size, µm**	Bulk Density (Scott)
Technical*	3 to 4	< 1 to 100	30	1.3 g/cm ³
Technical Fine	0.65 to 0.8	< 0.5 to 20	6	0.4 g/cm ³
Super Fine	0.4 to 0.45	< 0.5 to 8	1.5	0.3 g/cm ³

* Sieve analysis (U.S. Sieve Series) 100% through 100 mesh (149 µm)

**L&N Microtrac

PACKAGING

Molysulfide® Grade	US Packaging	
	Fiber Drum	Drums per pallet
Technical	200 lb net	9
Technical Fine	250 lb net	4
Super Fine	200 lb net	4

Molysulfide® Grade	Export Packaging	
	Steel Drum (lined)	Drums per pallet
Technical	100 kg	9
Technical Fine	100 kg and 4x25 kg per drum	4
Super Fine	50 kg and 75 kg	4