

PRODUCT DATA SHEET



MOLYSULFIDE®
Technical Grade,
Technical Fine Grade,
Super Fine Grade

DESCRIPTION

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

SPECIFICATIONS

	Percent by Weight		
	Technical	Technical Fine	Super Fine
Acid Insolubility	0.50 max	0.50 max	0.50 max
Carbon (C)	1.50 max	1.50 max	1.50 max
Iron (Fe)	0.25 max	0.25 max	0.25 max
MoO ₃	0.05 max	0.05 max	0.15 max
Oil	0.05 max	0.40 max	0.40 max
Water	0.02 max	0.05 max	0.15 max
Acid Number*	0.05 max	0.25 max	3.00 max

*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.

Particle Size Specifications by Microtrac®

Molysulfide® Grade	D50**	D99 (Maximum)**
Technical	16.0 – 30.0 µm	190 µm
Technical Fine	4.0 – 6.0 µm	36.0 µm
Super Fine	0.9 – 1.6 µm	7.0 µm

**L&N Microtrac®

Molysulfide® Grade	Bulk Density (Scott)
Technical	1.3 g/cm ³
Technical Fine	0.4 g/cm ³
Super Fine	0.3 g/cm ³

PACKAGING

Molysulfide® Grade	US Packaging Fiber Drum	Units per pallet	Pallet weight
Technical	200 lbs net	9	1800 lbs net
Technical Fine	250 lbs net	4	1000 lbs net
Super Fine	200 lbs net	4	800 lbs net

Molysulfide® Grade	Metric Packaging	Units per pallet	Pallet weight
Technical	100 kg net steel drum	9	900 kg net
Technical Fine	100 kg net steel drum	4	400 kg net
Technical Fine	25 kg net valve sack	40	1000 kg net
Super Fine	75 kg net steel drum	4	300 kg net

Produced at Fort Madison, Iowa.

SDS REQUIREMENTS

A copy of the safety data sheet (SDS) is available upon request.

QUALITY ASSURANCE / QUALITY CONTROL

All sites are **ISO 9001, 14001, 45001** certified. Analytical methods are available upon request.

CAS No: 1317-33-5 / EINECS No: 215-263-9

PDS MoS₂ REV24-01

Molysulfide® is a registered trademark of Climax Molybdenum Company.



ALL MOLYBDENUM PRODUCING SITES
OF FREEPORT-MCMORAN
ARE MOLYBDENUM MARK ASSURED
PRODUCERS



From Mine to You™ is a trademark of Climax Molybdenum Company. All rights reserved.
The trademark is currently pending registration.

www.climaxmolybdenum.com