MOLYKOTE® Z Powder

Solid lubricant

Features & benefits

- Excellent lubricating properties
- Reduction of friction and wear
- Resistant to oxidation
- Extreme pressure resistance
- Wide service-temperature range

Composition

- Molybdenum disulfide

Applications

MOLYKOTE® Z Powder can be used as a dry-burnished (rubbed-on) lubricating film for metallic contacts; as a solid lubricant additive for self-lubricating plastics and sinter metal parts; as a solid lubricant additive in metalworking compounds; as a solid lubricant additive in brake lining applications; as run-in aid, in press-fittings, in heavy-load and slow-speed applications, and also in extreme environments (e.g., in dusty atmospheres or extremes of temperatures).

Description

MOLYKOTE® Z Powder is a solid lubricant that lubricates metal surfaces in many difficult and extreme environments (e.g., metal/metal pairings at extreme loads and slow speeds, or metal/plastic pairings at low loads and low to medium speeds).

How to use

Rub the powder thoroughly in different directions on degreased dry surfaces using a hard brush or window leather. Can be applied by rotary brush, felt or polishing disks. Small parts should preferably be tumble-coated. Add to plastic elastomers and sinter metals before forming.

Handling precautions

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION.

Typical properties

Specification writers: These values are not intended for use in preparing specifications. Please contact your local MOLYKOTE® sales representative prior to writing specifications on this product.

Standard[1]	Test	Unit	Result
	Color		Charcoal gray to black
	Consistency		Free-flowing powder
	Purity (MoS_2 content)	%	98
CTM 1392	Particle size distribution (Laser Method Malvern Mastersizer in 2-propanol)	µm	90% <78.38 50% <31.59 10% <9.44
CTM 0268A	Particle size (Fisher Method)	µm	3-4
	Service temperature range	°C	-185 to 400
	Service temperature range (in vacuum)	°C	Up to 1,100
	Theoretical density (solid state)	g/cm^3	4.8
ISO 3923-2	Bulk density (powder state)	g/cm^3	1.3
CTM 0262 M	Water/moisture content	%	0.02
	Almen Wieland machine OK load	N	>20,000
	Press-Fit test	µ	0.048

[1]CTM: Corporate Test Method; copies of CTMs are available on request.
ISO: International Organization for Standardization

Usable life and storage

When stored at or below 20°C (68°F) in the original unopened bags, this product has a usable life of 60 months from the date of production.

Packaging

This product is available in different standard container sizes. Detailed container size information should be obtained from your nearest MOLYKOTE® sales office or MOLYKOTE® distributor.

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