◖ **DUPONT** ◗™

MOLYKOTE® G-4500/G-4501 Multi-Purpose Synthetic Greases

White, food grade synthetic greases

Features

- Wide service-temperature range
- Compatible with many plastics and elastomers
- Meet FDA Regulation 21 CFR 178.3570 and USDA H1 classifications for incidental food contact
- Fully synthetic base oil
- White color
- Available in NLGI consistency classes 1 and 2

Benefits

- Formulated to provide higher load carrying capacity, greater wear resistance and longer service life compared to conventional petroleum-based lubricants
- Provide good compatibility with most industrial and engineering substrates, including many plastic and rubber materials
- Excellent low temperature torque
- Low-consistency formulation of MOLYKOTE® G-4501 Multi-Purpose Synthetic Grease allows use in automatic dispensing systems

Composition

- PAO base oil
- Aluminum complex thickener
- Fortified with polytetrafluoroethylene (PTFE)

Applications

General purpose light-consistency white synthetic greases can be used in rolling element and plain bearings, pivot pins, cams, guides, ways, drive screws, gears, splines, and other machine elements.

Description

MOLYKOTE® G-4500/G-4501Multi-Purpose Synthetic Greases are high-performance greases that combine the benefits of wide operating-temperature range and broad compatibility with varied materials. Both are thickened with an aluminum complex and contain white solid lubricants. They can be used to lubricate bearings, gears, chains and sliding mechanisms in food processing machinery.

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.

MOLYKOTE® G-4500 Multi-Purpose Synthetic Grease

Standard[1]	Test	Unit	Result
Consistency, viscosity, specific gravity			
DIN 51 818	NLGI consistency class		2
ASTM D217	Penetration at 25°C (77°F) (W/60)	mm/10	265-295
ASTM D445	Base oil viscosity at 40°C (104°F)	cSt	100
ASTM D445	Base oil viscosity at 100°C (212°F)	cSt	14.4
ISO 2811	Specific gravity at 25°C (77°F)	g/ml	0.84
Temperature			
	Temperature range (approximate)	°C	-40 to 150
		°F	-40 to 302
ASTM D2265	Dropping point	°C	>270
		°F	>518
FD 791-32/2	Oil bleed, 24 hours, 100°C (212°F)	wt%	3.1
FD 791-32/2	Oil evaporation, 24 hours, 100°C (212°F)	wt%	0.4
ASTM D4693	Low-temperature torque at -40°C (-40°F)	Nm	0.9
Load-carrying capacity, wear protection, speed			
ASTM D2266	Four-ball wear, 40 kg, 1,200 rpm	mm	0.5
ASTM D2596	Four-ball EP, weld load, minimum	N	>3,100
ASTM D2509	TIMKEN test, OK load	kg	>18
	Dn, bearing ID (mm)x(rpm), estimated		325,000

[1]ASTM: American Society for Testing and Materials. ISO: International Standardization Organization. DIN: Deutsche Industrie Norm. FD: Federal Standard: Testing Method of Lubricants Liquid Fuels and Related Products.

Typical properties (continued)

MOLYKOTE® G-4501 Multi-Purpose Synthetic Grease

Standard[1]	Test	Unit	Result
Consistency, viscosity, specific gravity			
DIN 51 818	NLGI consistency class		1
ASTM D217	Penetration at 25°C (77°F) (W/60)	mm/10	310-340
ASTM D445	Base oil viscosity at 40°C (104°F)	cSt	100
ASTM D445	Base oil viscosity at 100°C (212°F)	cSt	14.4
ISO 2811	Specific gravity at 25°C (77°F)	g/ml	0.83
Temperature			
	Temperature range (approximate)	°C	-40 to 150
		°F	-40 to 302
ASTM D2265	Dropping point	°C	>260
		°F	>500
FD 791-32/2	Oil bleed, 24 hours, 100°C (212°F)	wt%	4.7
FD 791-32/2	Oil evaporation, 24 hours, 100°C (212°F)	wt%	0.5
ASTM D4693	Low-temperature torque at -40°C (-40°F)	Nm	0.7
Load-carrying capacity, wear protection, speed			
ASTM D2266	Four-ball wear, 40 kg, 1,200 rpm	mm	0.5
ASTM D2596	Four-ball EP, weld load, minimum	N	>3,100
ASTM D2509	TIMKEN test, OK load	kg	>18
	Dn, bearing ID (mm)x(rpm), estimated		325,000

[1]ASTM: American Society for Testing and Materials. ISO: International Standardization Organization. DIN: Deutsche Industrie Norm. FD: Federal Standard: Testing Method of Lubricants Liquid Fuels and Related Products.

How to use

Apply using conventional grease application methods (i.e., clean brush, grease gun, and manual or automated dispensing equipment).

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.

Usable life and storage

When stored at or below 40°C (104°F) in the original unopened containers, these products have a usable life of 60 months from the date of production.

Packaging

These products are available in different standard container sizes. Detailed container size information should be obtained from your nearest MOLYKOTE® sales office or MOLYKOTE® distributor.