

# Product Information

## High Performance Lubricants

DOW CORNING

# Molykote<sup>®</sup> HP-500 Grease

### FEATURES & BENEFITS

- Compatible with most plastics
- Excellent stability at high temperatures
- Superior resistance to chemicals and solvents
- Minimal deterioration due to oxidation, appropriate for long-term lubrication
- Low vapor pressure (base oil)

### COMPOSITION

- Perfluoro polyether
- Fluorinated polymer

Fully fluorinated grease provides extraordinary performance under extreme conditions

### APPLICATIONS

- *Molykote*<sup>®</sup> HP-500 Grease can be used broadly under harsh conditions such as high temperatures, corrosive, solvent, liquefied natural gasses, high vacuum, etc.
- Clean room equipment and semiconductor manufacturing equipment where the vaporization of the lubricating material is undesirable.

### TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

Test*	Parameter	Unit	Value
	Appearance		White
JIS K 2220	Penetration (worked 60 times)	mm/10	280
	NLGI class		2
	Service temperature range	°C	-20 to 200
	Density	g/cm <sup>3</sup>	2.0
MIL-S-8660	Bleed (200°C 24 hours )	%	0-4
MIL-S-8660	Evaporation (200°C 24 hours)	%	0-1
MIL-S-8660	Evaporation (200°C 1000 hours)	%	0.8
ASTM D2596	Four ball weld load (1500rpm/1minute)	N	3440
ASTM D2266	Four ball wear scar (1200rpm, 392N, 1 hour)	mm	0.9
JIS K 2220	Low temperature torque test (-20°C)		
	Starting torque	Ncm	34
	Running torque	Ncm	18
JIS K 2220	Low temperature torque test (-40°C)		
	Starting torque	Ncm	Not measurable
	Running torque	Ncm	Not measurable
	Base oil vapor pressure 20°C	Pa	1.33x10 <sup>-6</sup>

\*JIS: Japanese Industrial Standard.

MIL: Military Specification and Standards.

ASTM: American Society for Testing and Materials.

### DESCRIPTION

*Molykote* HP-500 Grease is a perfluoropolyether (PFPE)-based grease thickened with polytetrafluoroethylene (PTFE) useful for reducing wear in many plastic-on-plastic applications.

### HOW TO USE

Clean point of application. As is usual with lubricating greases, apply or fill

by means of a brush, spatula, or automatic lubrication device.

### HANDLING PRECAUTIONS

Although *Molykote* HP-500 Grease is highly chemically stable, at temperature in excess of 250°C the material will gradually decompose and release toxic gasses; be sure to have adequate ventilation if you expect the material to decompose. Do not smoke cigarettes

that are contaminated with this product. Be sure to wash hands thoroughly after use.

**PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE MATERIAL SAFETY DATA SHEET IS AVAILABLE ON THE DOW CORNING WEBSITE AT DOW CORNING.COM, OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CORNING CUSTOMER SERVICE.**

## **USABLE LIFE AND STORAGE**

When stored, unopened in a cool, dark place this product, has a usable life of 36 months from the date of production.

## **PACKAGING INFORMATION**

This product is available in 100g plastic cans and 500g plastic cans.

## **LIMITATIONS**

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

## **HEALTH AND ENVIRONMENTAL INFORMATION**

To support Customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, [dowcorning.com](http://dowcorning.com) or consult your local Dow Corning representative.

## **LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY**

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Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

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