#### DOW CORNING

# Product Information High Performance Lubricants

# Molykote® HP-870 Grease

## **FEATURES & BENEFITS**

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

## **COMPOSITION**

- · Perfluoro polyether
- Fluorinated polymer
- Corrosion inhibitor

Fully fluorinated grease provides extraordinary performance under extreme conditions

## **APPLICATIONS**

- Molykote<sup>®</sup> HP-870 Grease can be used broadly under harsh conditions such as high temperatures, corrosive, solvent, liquefied natural gasses, high vacuum, etc.
- This grease is ideally used for use in clean rooms, semiconductor manufacturing equipment, cardboard manufacturing equipment, hot air dryer motor axles, etc., where the evaporation of the lubricant could be problematic.

#### 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*	Property	Unit	Value
	Appearance		White
JIS K 2220	Penetration (worked 60 times)	mm/10	280
	Service temperature range	$^{\circ}\mathrm{C}$	-20 to 250
	NLGI class		2
	Density	g/cm <sub>3</sub>	2.0
MIL-S-8660	Bleed (200°C, 24 hours)	%	5.0
MIL-S-8660	Evaporation (200°C, 24 hours)	%	1.0
MIL-S-8660	Evaporation (200°C, 1000 hours)	%	3.0
ASTM D2596	Four ball weld load (1500rpm/1minute)	N	>4900
ASTM D2266	Four ball wear scar	mm	1.3
	(1200rpm, 392N, 1 hour)		
JIS K 2220	Low temperature torque test (-20°C)		
	Starting torque	Ncm	54
	Running torque	Ncm	28
JIS K 2220	Low temperature torque test (-40°C)		
	Starting torque	Ncm	Not
			measurable
	Running torque	Ncm	Not
			measurable
DIN 51 802	Emcor corrosion test		0 to 1
	Base oil vapor pressure 20°C	Pa	$2x10^{-6}$

<sup>\*</sup>JIS: Japanese Industrial Standard.

DIN: Deutsches Industrie Norm.

MIL: Military Specification and Standards.

ASTM: American Society for Testing and Materials.

## **HOW TO USE**

Clean points of contact. As is usual with lubricating greases, apply or fill by means of a brush, spatula, or automatic lubrication device.

# HANDLING PRECAUTIONS

Although *Molykote* HP-870 Grease is highly chemically stable, it gradually begins to break down at temperatures in excess of 250°C releasing a toxic gasses; be sure that this product is only used in an environment with adequate ventilation. Do not smoke cigarettes if they have been in contact with this product. Be sure to wash hands thoroughly after working with this product.

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 WEB SITE 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 different standard container sizes. Detailed container size information should be obtained from your nearest Dow Corning sales office or Dow Corning distributor.

#### 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 or consult your local Dow Corning representative.

# LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

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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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