

Product Information

Specialty Lubricants

DOW CORNING

Dow Corning® High-Vacuum Grease

FEATURES

- Low volatility to hold deep vacuums
- Resists oxidation
- Nonmelting
- Good thermal stability

COMPOSITION

- Stiff, nonmelting silicone material

Grease designed for sealing and lubricating vacuum and pressure systems

APPLICATIONS

- Seal and lubricate chemical processing equipment
- Lubricate plug valves, control valves, flow meter bearings, ceramic plug cocks and fire extinguisher valves
- Maintain vacuum and pressure systems
- Lubricate water-treating equipment
- Lubricate synthetic rubber gaskets and seals in high-temperature applications
- Lubricate laboratory equipment
- Lubricate O-rings on binoculars and telescopes
- Help prevent fogging of delicate lenses

TYPICAL PROPERTIES

Specification Writers: Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

Method	Test	Unit	Result
	Color		Translucent white
ASTM D 217	Penetration, unworked	mm/10	185
	worked 60, max	mm/10	205
	worked 100,000	mm/10	227
	Service Temperature Range ¹	°C (°F)	-40 to 204 (-40 to 400)
Fed Std 791	Bleed, after 24 hr at 200°C (392°F), max	percent	0.05
Fed Std 791	Evaporation, after 24 hr at 199°C (390°F), max	percent	1.1
ASTM D 70,			
ASTM D 1217	Specific Gravity at 25°C (77°F)	g/cc	1.0
ASTM D 2265	Drop Point	°C (°F)	>300 (572)
	Water Spray Off	percent	1.65

¹Estimated service temperature range based on product formulation and laboratory testing. Actual service temperature range is dependent on other factors including the specific application environment.

DESCRIPTION

Dow Corning® High-Vacuum Grease is a stiff, nonmelting silicone lubricating material that maintains its consistency from -40 to 204°C (-40 to 400°F). It is used in applications similar to those for Dow Corning® Stopcock Grease, and is the recommended replacement for that product.

Dow Corning High-Vacuum Grease is recommended for vacuums reaching between 1×10^{-5} and 1×10^{-6} mm Hg. It

is recommended that the grease be preconditioned under vacuum and temperature until these limits are reached. For details on attaining higher vacuums, please contact Dow Corning Customer Service at 1-800-248-2481.

LISTINGS/SPECIFICATIONS

- FDA 21 CFR 175.300
- USDA – Approved for incidental food contact in federally inspected meat and poultry plants
- NSF 61

PERFORMANCE DATA

Chemical Resistance

Dow Corning High-Vacuum Grease resists vegetable and mineral oils and common gases. It also resists aqueous solutions of inorganic salts and dilute acids and alkalis.

Securing or including complete information on variables such as pressure, flow velocity, relubrication schedules and valve construction is impractical. For this reason, the suitability of *Dow Corning* High-Vacuum Grease should always be tested before the material is adopted for regular use.

HANDLING PRECAUTIONS

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 FROM YOUR DOW CORNING REPRESENTATIVE, OR DISTRIBUTOR, OR BY CALLING YOUR GLOBAL DOW CORNING CONNECTION.

USABLE LIFE AND STORAGE

When stored under normal warehouse conditions, *Dow Corning* High-Vacuum Grease has a shelf life of 60 months from date of manufacture. Refer to product packaging for "Use By" date.

PACKAGING

Dow Corning High-Vacuum Grease is supplied in 150-g (5.3-oz) tubes and 3.6-kg (8-lb) pails, net weight.

LIMITATIONS

Dow Corning High-Vacuum Grease is not recommended for use:

- In contact with liquid oxygen and should not be used in applications requiring LOX compatibility
- With silicone elastomers
- On surfaces to be painted; paints will not adhere well
- As a lubricant in metal bearings

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

SHIPPING LIMITATIONS

None.

WARRANTY INFORMATION

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 *Dow Corning*'s products are safe, effective, and fully satisfactory for the intended end use.

Dow Corning's sole warranty is that the product will meet the *Dow Corning* sales specifications in effect at the time of shipment. 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. *Dow Corning* specifically disclaims any other express or implied warranty of fitness for a particular purpose or merchantability. Unless *Dow Corning* provides you with a specific, duly signed endorsement of fitness for use, *Dow Corning* disclaims liability for any incidental or consequential damages. Suggestions of use shall not be taken as inducements to infringe any patent.