Extraordinary environments need extraordinary lubricants.
Silicone-based lubricants for extreme environments.

Tough conditions need silicone-based lubricants. And Novagard has over 40 years experience in silicone. The unique properties work in extreme environments to offer a longer service life. The typical properties you can expect:

**Typical properties include:**

- Wide operating temperature ranges, -73°C to 205°C
- Maintains consistency without smoking, melting, or charring
- High oxidation resistance
- Excellent dielectric performance
- Noncorrosive, chemically inert, compatible with plastic and most organics
- Superior release
- Excellent hydrolytic stability
Silicone Greases
Lithium soap thickened greases to reduce friction and wear under loads, slow speeds, and variable environmental conditions.

- G321 Ultrapure operating temperature
  Temp range: -73°C to 250°C
- G322L Outstanding corrosion protection
  Temp range: -65°C to 150°C
- G326 Enhanced corrosion protection
  Temp range: -65°C to 150°C
- G330M General purpose lubricant
  Temp range: -65°C to 150°C
- G351 Oxidation and oxidation resistant
  Temp range: -40°C to 250°C

General Purpose/Dielectric Compounds
Silicones thickened with inorganic fibers for lubrication and insulation are resistant to oxidation and thermal degradation.

- G624 Superior dielectric strength
  Temp range: -40°C to 250°C
- G635 Ultra low operating temperature
  Temp range: -40°C to 250°C
- G661 Seals and protects electrical connections above and below ground, resist plastic and rubber lubricant
  Temp range: -40°C to 250°C
- G662 Certified to NSF Standard 61 for drinking water system components
  Temp range: -40°C to 250°C
- G687 Ideal for high voltage insulators to prevent flashover
  Temp range: -40°C to 250°C
- G697 Inhibitor fights galvanic corrosion
  Temp range: -40°C to 150°C

Thermally Conductive Compounds
Non-conducting materials offering excellent heat transfer in large and small electronic and electrical equipment. Thermally conductive compounds provide cost-effective thermal management in a wide variety of applications.

- G641 Ideal for thermocouple wires, power diodes, transistors, steel, and conductors
  Temp range: -40°C to 250°C
- G644 A softer and lower viscosity version of G641
  Temp range: -40°C to 250°C

Methods of Application
Silicone greases may be wiped on, brushed on, dispensed from a grease gun, or applied by automated equipment. In addition, when dispensed in a nonmetallic solvent, they may be applied by spraying, dipping, or dip-coating. Contact is required in the selection of solvents.

Handling and Safety
Cleaning of silicone greases and compounds can be accomplished using nonpolar solvents such as mineral spirits. They are stable in standard solvents, inks, and adhesives.

Silicone greases are not suitable for use in contact with high concentrations of oxygen or highly oxidizing materials. Contact with high pressure oxygen, ozone, peroxides, or fuming nitric acid can result in fire or explosion. Silicone materials are damaged by exposure to strong nitric acids (e.g. sulfuric, hydrochloric, nitric), strong alkali solutions (e.g. caustic or phosphorus hydrazine, nitric, or peracids).

Material Compatibility
Generally, silicone materials have the following impact on material properties:
- Silicone rubber: Often not compatible, consult your sales representative.
- Fluorinated rubber: No effect.
- Organic rubber: Slight shortening, hardening, and loss of physical properties.
- Plastic: No effect on polycarbonates, phenolics, polyethylene, metal, methacrylates, or PETE.

In general, silicone greases and compounds are not recommended for bearings with a D/N ratio exceeding 200,000. D/N ratio is calculated by multiplying the diameter (mm) times the bearing speed (rpm).