Grease Lubrication

Product Information and Data Sheet

Hi-Tech POLYUREA GREASE 100/460

HIGH PERFORMANCE POLYUREA GREASE

Description

Hi-Tech Polyurea Grease, a premium NLGI No. 2 grease formulated to provide superior lubrication for high-speed ball and roller bearings in a variety of long-life applications. Its advanced polyurea thickener technology ensures optimal performance and protection against wear and tear, making it an ideal choice for alternators, generators, starters, electric motors, and more.Unlike other greases that may contain extreme pressure additives that can potentially harm electric motor bearings, Hi-Tech Polyurea Grease is specifically designed without such additives, while still providing excellent protection against rust and oxidation.

Experience the benefits of Hi-Tech Polyurea Grease, a high-performance and long-lasting multi-purpose grease that can effectively lubricate bearings, bushings, brake calliper pins even in the toughest conditions of high load, high temperatures, and ingress of splash water.

Hi-Tech Polyurea greases can support heavy loads and maintain thermal stability at high temperatures. They last longer than lithium-based greases, have good water resistance and high-shear stability. They are often preferred for sealed-for-life applications because they can handle high operating temperatures, have antioxidative properties, high thermal stability, and low bleed characteristics

Hi-tech Polyurea greases are good for protecting the inner additives of constant velocity joints from high stress and enhancing their performance. They are also recommended for the bearings of rolling mills in steel mills, as they can handle high weight, high temperature and prevent contamination and corrosion.

Electric motors & High-speed application

electric motors, polyurea grease is a good choice as it can lubricate at high temperatures, reduce friction, protect against corrosion and act as a seal. Polyurea grease is also recommended for high-speed antifriction bearings, car wheel bearings, chassis parts, air conditioner compressors, clutch bearings, water pumps and pulleys

Application of Hi-Tech Polyurea Grease

Hitech Polyurea greases are a type of lubricant that are particularly well-suited for use in various types of equipment, including the constant velocity (CV) joints found in many machines. These joints require high-quality lubricants to protect their internal additives from high levels of stress. Polyurea greases are a superior option for CV joints as they provide excellent protection and overall performance. In addition, Hitech polyurea greases are commonly used in steel mill continuous castors (CC), which require lubrication that can withstand high temperatures and weight. Polyurea greases offer excellent pumpability and act as a seal to prevent contamination and corrosion. They are also recommended for electric motors, as they can lubricate at high temperatures, reduce friction, and protect bearings against corrosion and contamination.

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HITECH SOLUTION
SPEED INNOVATION EXCELLENCE

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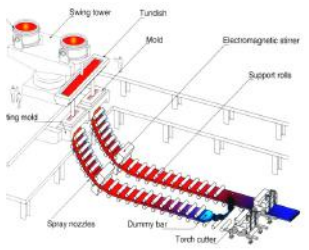
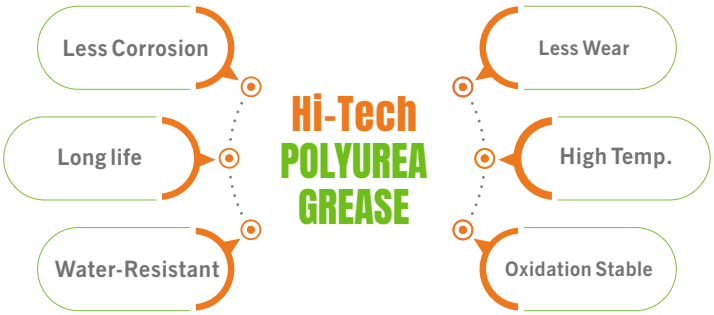


Hitech Polyurea greases are particularly useful for bearings that are exposed to high temperatures above 120°C, and are often preferred for sealed-for-life applications due to their high operating temperatures, antioxidative properties, thermal stability, and low bleed characteristics. These greases have a longer average lifespan compared to other types of greases, and exhibit excellent water resistance, mechanical stability, and high-shear stability.

Features and Benefits

- Hitech Polyurea greases are highly effective for use in industrial equipment because they offer the following benefits:
- Excellent protection against rust and corrosion
- Great wear and intense stress protection
- High load-wearing capacity & Low noise
- Long-lasting bearings life.
- Excellent stability under high temperatures and against oxidation
- Resistant to water washout and spray-off
- Durable and stable against shear
- Can be used across a wide temperature range, reducing the need for multiple greases



- Can be used at high temperatures due to high thermal load capacity
- Long product life due to excellent aging stability

How to use

To use Hi-Tech Polyurea Grease, begin by cleaning the points of lubrication thoroughly. Next, apply the grease using a brush, spatula, or automatic filling device, following standard lubricating grease procedures. Avoid mixing it with other types of grease.

Handling precautions

Please exercise caution when handling Hi-Tech Polyurea Grease, as information regarding safe usage is not included in this description. It is recommended to read the product and safety data sheets as well as container labels to learn about safe use, physical and health hazards. The material safety data sheet is available through your local Hi-Tech's sales representative or distributor.

Usable life and storage

When stored in its original unopened container, this product has a usable life of 36 months from the date of production. Please ensure proper storage to maintain the product's effectiveness.

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Technical Properties

Characteristics \ Series	Method	PUG 100	PUG 460
NLGI Grade	NLGI	2/3	2
Color	Visual	Beign	Amber
Appearance	Manual	Smooth	Smooth
Thickener Type	Applicable	Polyurea	Polyurea
Thickener Content	Operational	12-15%	12-15%
Penetration, Worked 60 Strokes	ASTM D 217	250-265	265-295
Roll Stability	ASTM D 1831	Less than 2%	Less than 2%
Dropping Point	ASTM D 2265	> 265°C	> 265°C
Oxidation Stability, psi loss 100 hours	ASTM D 942	< 3.5	< 5
Four-Ball Wear, Scar diameter	ASTM D 2266	< 0.5 mm	< 0.5 mm
Four Ball ,Weld Load, KG	ASTM 2596	250	250
Timken OK Load	ASTM D 2509	45 lb.	45 lb.
Corrosion Protection	ASTM D 1743	Pass	Pass
EMCOR Corrosion, (Rust Protection)	ASTM D 6138	0-0	0-0
Water Washout, 175°F (79°C)	ASTM D 1264	< 5 %	< 5 %

Base Oil Characteristics

Viscosity, 40°C	ASTM D 445	100-120	460
Oil Separation	ASTM D 1742	0.4 %	0.3 %
Flash Point	ASTM D 92	245°C	255°C
Bearing Life, 350°F (177°C)	ASTM D 3336)	> 750 hours	> 750 hours
Evaporation loss, 22h @ 99°C, %wt	ASTM D972	0.14	0.12

Product and environmental safety

This product is safe to use as long as it's used for the suggested applications and instructions provided in the Material Safety Data Sheet (MSDS) are followed. You can get the MSDS from your local distributor for more detailed advice on handling.
Do not use this product for any other applications than the ones suggested. When disposing of this product, please take care not to harm the environment. Used oil should be sent for recycling or if that's not possible, disposed of in accordance with relevant government/authority regulations

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