



ZAP GREASE
EXTREME
VG 460 X1

Description

ZAP Grease EXTREME VG 460 X1 is an extra high performance heavy duty lubricating grease based on calcium sulfonate complex thickener system and deeply hydrotreated mineral and synthetic base oils blend. A unique structure of calcium sulfonate complex thickener provides very high dropping point, extraordinary built-in extreme pressure and anti-wear performance, excellent mechanical stability, good rust protection and superior water wash out / water spray off resistance. This makes it a truly multipurpose grease suitable for the toughest operating conditions in wide range of marine, industrial and automotive applications.

Application

ZAP Grease EXTREME VG 460 X1 is specially developed for the lubrication in the most severe conditions: under extremely high and shock loads, very high temperatures and in dirty and wet environments.

It is suitable for heavy duty industrial equipment used in: mining/quarrying, pellet production (hard wood & soft wood pelleting), cement, heavily loaded bearings in steel and metal working industries, paper production and other industrial applications. Perfectly adapted to the lubrication of heavy duty equipment in off-road applications including: agriculture and forestry, logging, mining, construction equipment, as well as heavy duty automotive applications. It is also suitable for use in marine and off-shore applications and for general lubrication of axles, ball joints, universal joints, couplings and bushings.

Operating temperature range:
 from -20 to 180°C (temporary up to 200°C).

Performance Features

- **Inherent Extreme Pressure properties**
 The highest level of extreme pressure properties delivered by thickener itself and new generation additives to withstand heavy and shock loads without failure of the lubricant film. Extends equipment and moving components life under shock-loaded and vibration conditions.
- **Exceptional Water resistance**
 The highest level of resistance to water wash-out and spray-off. Resistant to sea water.
- **Excellent Mechanical Stability**
 Resistant to softening and leakage under the highest loads. Mechanical stability kept in the presence of water.
- **Excellent Thermal Stability**
 Does not liquefy until >305°C.
- **High Dropping Point**
 Temperature operating range up to 180°C (temporary up to 200°C) and good low temperature performance.
- **Rust and Corrosion Protection**
 Protects metal parts from rust and corrosion. Extends equipment life.
- **Wide Range of Applications**
 A top performance multipurpose grease.

Technical Specifications

ISO 6743-9: ISO-L-XBFBH 1
 DIN 51 502: KP1R-20



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Technical Data

Characteristics	Test Method	Unit	Typical Value
NLGI grade	ASTM D 217	-	1
Thickener		-	Calcium Sulfonate Complex
Base Oil			Synthetic Blend
Base Oil Viscosity at 40°C		mm ² /s	460
Colour	Visual	-	Brown
Appearance	Visual	-	Smooth, Homogenous
Cone Penetration, Worked	ISO 2137	1/10 mm	310-340
Change in consistency	ISO 2137	0,1 mm	<15 (after 10000 cycles)
Operating Temperature Range		°C	-20 - 180 (200)
Dropping Point	ISO 6299	°C	>305
Oil Separation, 42h at 40°C, wt%	IP 121		0,5% typical
Oxidation Stability	ASTM D 942	kPa	32,4 (100h, at 100°C)
Corrosive Effects on Copper	ASTM D4048	Rated	max 1
Dynamic Rust Test, EMCOR	ISO 11007	Rated	0-0 Distilled Water
Water Resistance Test	DIN 51807-1	Rated	1-90 (3 hrs at 90°C)
Water Washout Test	ISO 11009		<2% typical (79°C, wt.% loss)
Four-Ball Weld Load	ASTM D2596	kgf	715
Four-Ball Wear Test, Wear Scar	ASTM D2266	mm	0,45 typical

Above characteristics are mean values given as an information.

No warranty expressed or implied is given concerning the accuracy of the information or the suitability of the product

Product Data

Stock No. Z-12.1 / Z-12.3

Packages: 18 kg Keg / 180 kg Drum

33 Kegs per Pallet / 4 Drums per Pallet

Barcode 18 kg Keg / 180 kg Drum: 4752134000475 / 4752134000482

Shelf Life: 5+ years (from date of manufacture)