

CHEVRON LUBRICANTS



CHEVRON GREASE TOOLKIT



Chevron Toolkit Greases Available by Thickener Type

Lithium

Ultra Duty Grease

Lithium Complex

Starplex® EP 2

Delo® Grease EP 2

Delo Grease ESI®

Delo Heavy Duty EP 2

Delo Heavy Duty Moly 3% EP 2

Delo Heavy Duty Moly 5% EP 2

Delo Heavy Duty Synthetic Moly 5% EP 1

Ulti-Plex® Synthetic Grease EP

Polyurea

Black Pearl® Grease EP 2

SRI Grease

Delo Synthetic Grease SF














Chevron Grease Toolkit

This toolkit is designed as a hands-on approach to help the end-user focus on selecting the right premium Chevron greases for various segments, applications and conditions to ensure operational reliability, while allowing for consolidation of greases within their organization.

Throughout this toolkit we will refer to segment, application and condition icons - these have been defined below for your quick reference:








Key Segments:

-  Automotive
-  Fleet/Owner Operator
-  Service Trucks
-  Buses
-  Construction
-  Agriculture
-  Mining
-  Manufacturing
-  Marine
-  Power Generation
-  Oil and Gas

Applications:

-  Electric Motors
-  Centralized Systems
-  Gears
-  Couplings
-  Bearings - Heavy Loaded
-  Bearings - Light Loaded
-  Multipurpose

Conditions:

-  High Temperature
-  Low Temperature
-  High Speed
-  Low Speed
-  Shock / Extreme Load
-  High Moisture
-  Boundary Film Lubrication

With grease, you are not just selling lubricants – you are selling reliability and at Chevron, we want to help you maximize equipment reliability through knowledge, products and services in order to attain dependable and efficient performance across various operations.

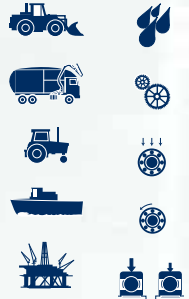
Ultra Duty Grease EP

Grease Description

- Li 12-hydroxystearate thickener with high viscosity base oil
- Unique EP additive package and tackiness
- General industrial applications
- NLGI grades 0, 1, and 2



Key Segments Applications Conditions



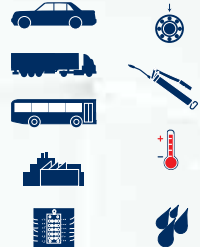
Starplex® EP

Grease Description

- Lithium complex thickener with high viscosity index base oils
- Multipurpose grease for bearings, chassis, and general lubrication
- Approved for NLGI certification mark GC-LB for NLGI grades 1 and 2



Key Segments Applications Conditions



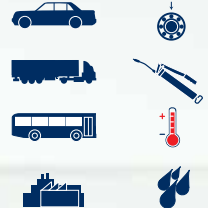
Delo® Grease EP

Grease Description

- Lithium complex thickened with high viscosity index base oils
- Excellent anti-wear/extreme pressure additive chemistry
- Approved for NLGI certification mark GC-LB for NLGI grades 1 and 2
- NLGI grades 00, 0, 1 and 2



Key Segments Applications Conditions



Delo® Grease ESI®

Grease Description

- Lithium complex thickened with medium/heavy viscosity base oil
- Good pumpability versus heavy-duty greases
- Approved for NLGI certification mark LB
- Extended service protection for chassis, bearings, fifth wheels and king pins
- Excellent water washout resistance
- NLGI grade 2



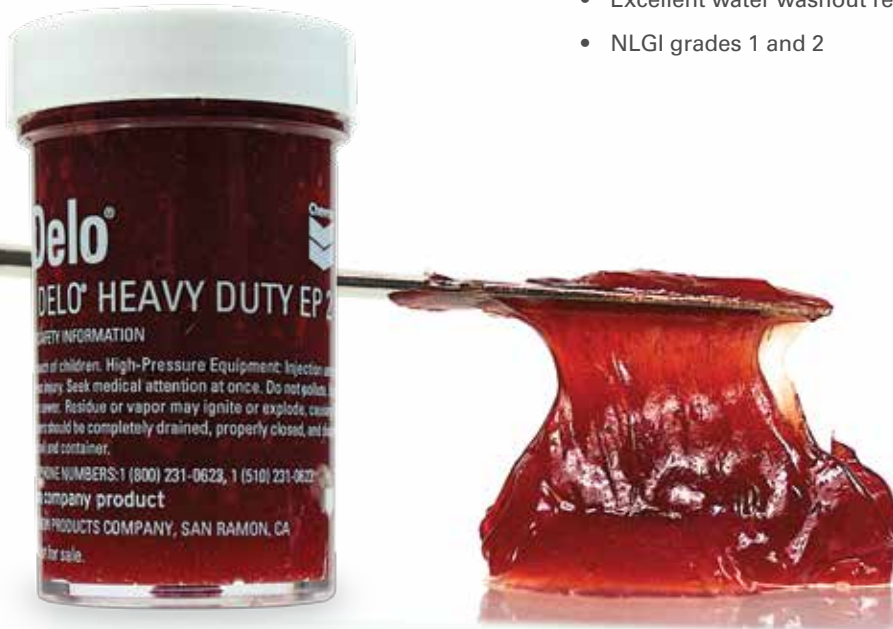
Key Segments Applications Conditions



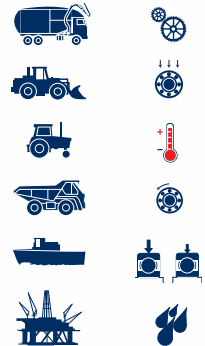
Delo® Heavy Duty EP

Grease Description

- Lithium complex thickened with heavy viscosity base oil
- Designed for heavy shock loading applications
- Designed for mixed fleet applications
- Excellent water washout resistance
- NLGI grades 1 and 2



Key Segments Applications Conditions



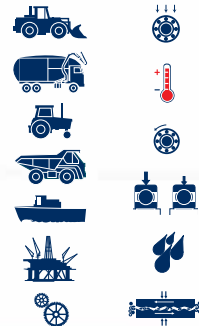
Delo[®] Heavy Duty Moly 3% EP



Grease Description

- Lithium complex thickened with heavy viscosity base oil
- Designed for heavy shock loading applications
- Formulated with 3% MoS₂ to meet major off-highway OEM specs including CAT, John Deere and Komatsu
- NLGI grades 1 and 2

Key Segments Applications Conditions



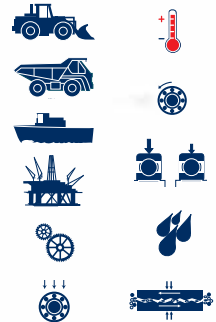
Delo® Heavy Duty Moly 5% EP

Grease Description

- Lithium complex thickened with heavy viscosity base oil
- Designed for heavy shock loading applications
- Formulated with 5% MoS₂ to meet CAT and other OEM mining requirements
- NLGI grades 1 and 2



Key Segments Applications Conditions



Delo[®] Heavy Duty Synthetic Moly 5% EP



Grease Description

- Lithium complex thickened with synthetic PAO base oil
- Designed for heavy shock loading applications
- Formulated with 5% MoS₂ to meet CAT and other OEM mining requirements
- Excellent cold weather pumpability/application
- NLGI grade 1



Key Segments Applications Conditions



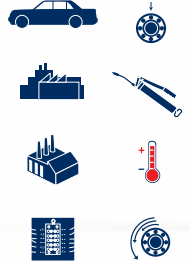
Black Pearl® Grease EP



Grease Description

- Polyurea thickened with premium base oil
- Excellent pumpability for centralized greasing systems
- Superb high speed/high temperature in roller bearings
- Approved for NLGI certification mark GC-LB for NLGI grades 1 and 2
- Check compatibility with other greases
- NLGI grades 0, 1 and 2

Key Segments Applications Conditions



SRI Grease

Grease Description

- Premium ashless polyurea thickener
- Can be used as a “life pack” lubricant in sealed bearings
- For use in anti-friction bearings operating at high speeds (10,000 rpm and greater)
- Primary recommendation for electric motor bearings
- Check compatibility with other greases
- NLGI grade 2



Key Segments Applications Conditions



Delo[®] Synthetic Grease SF



Grease Description

- Polyurea thickened with synthetic PAO base oil and special friction reducing agents
- Specifically engineered for trailer wheel-ends lubrication in a wide range of conditions
- Excellent anti-wear and low friction performance
- Extended lubrication intervals
- High temperature stability up to 375° F
- Low temperature lubrication down to -50° F
- NLGI grade 0

Key Segments Applications Conditions



Ulti-Plex[®] Synthetic Grease EP

Grease Description

- Lithium complex thickened with high VI synthetic base oil
- Engineered for a wide range of temperature conditions
- High temperature stability up to 450° F
- Low temperature lubrication down to -40° F
- Excellent water washout resistance
- Can optimize lubrication intervals in various applications
- NLGI grade 1

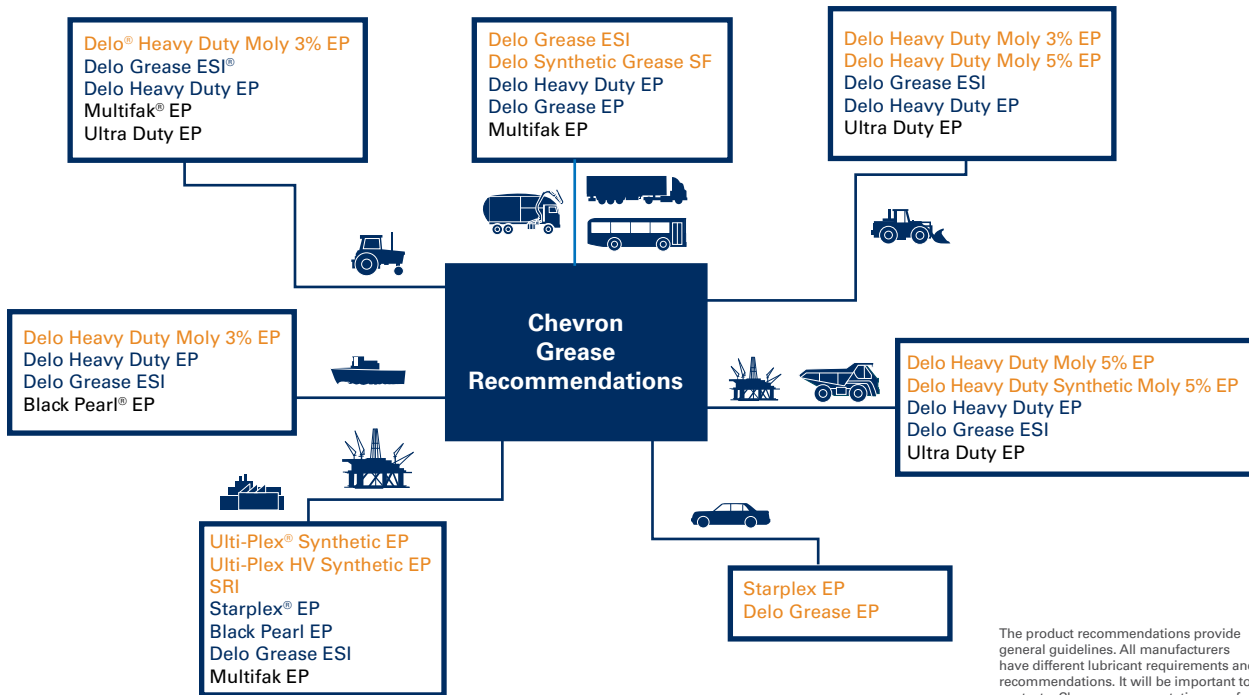


Key Segments Applications Conditions



Chevron Lubricants Greases

Protection Performance for All Key Segments (Typical Recommendations)

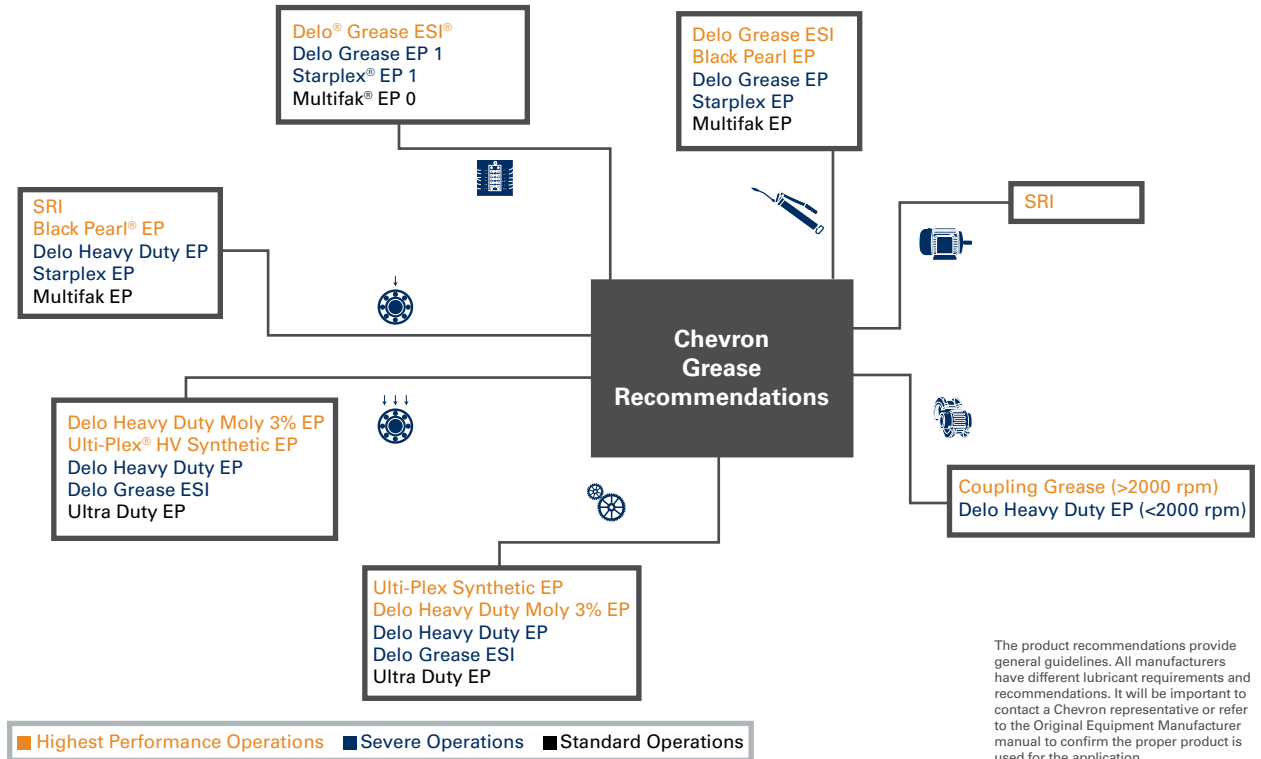


■ Highest Performance Operations ■ Severe Operations ■ Standard Operations

The product recommendations provide general guidelines. All manufacturers have different lubricant requirements and recommendations. It will be important to contact a Chevron representative or refer to the Original Equipment Manufacturer manual to confirm the proper product is used for the application.

Chevron Lubricants Greases

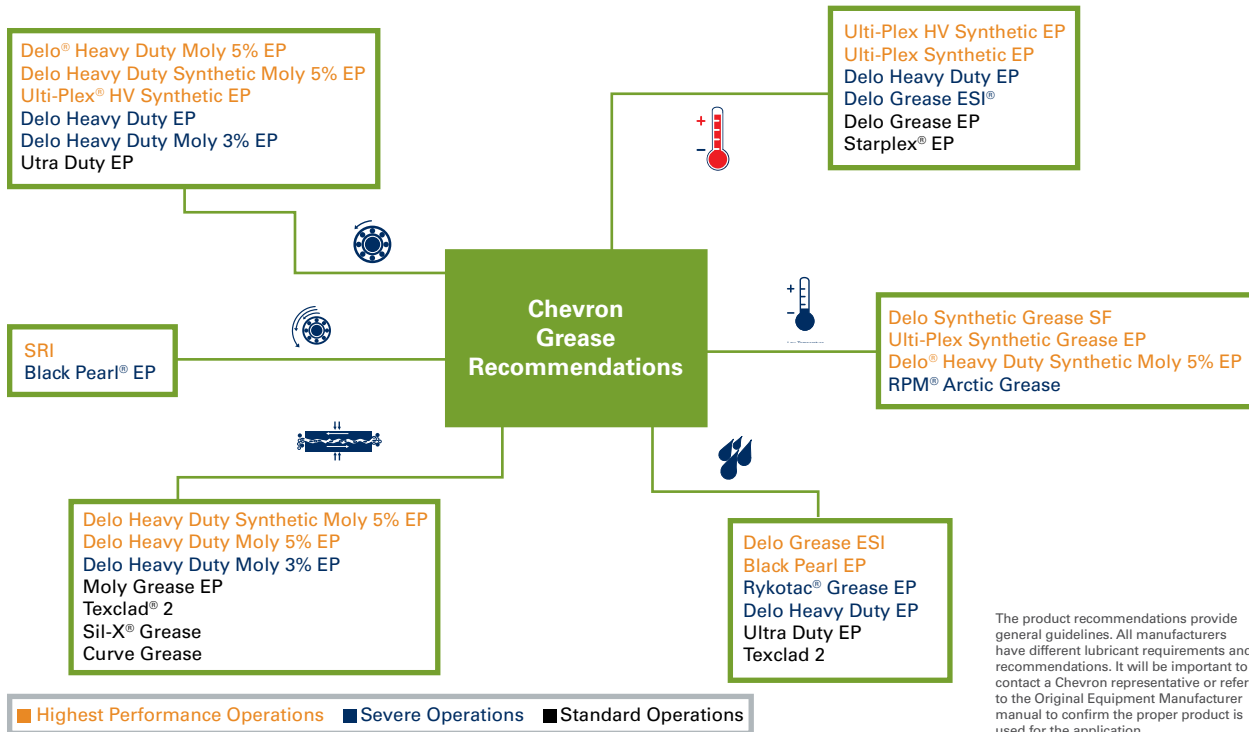
Protection Performance for All Applications (Typical Recommendations, Check Conditions)



The product recommendations provide general guidelines. All manufacturers have different lubricant requirements and recommendations. It will be important to contact a Chevron representative or refer to the Original Equipment Manufacturer manual to confirm the proper product is used for the application.

Chevron Lubricants Greases

Protection Performance for All Conditions (Typical Recommendations, Check Conditions)



What Is a Grease?

Grease Definition (ASTM)

- "A solid to semifluid product of dispersion of a thickening agent in liquid lubricant. Other ingredients imparting special properties may be included."

General Grease Components

- Base oil
- Thickener
- Additives



General Functions and Purpose

- Lubricate contact surfaces
- Reduce friction and wear
- Protect against rust and corrosion
- Lubrication is infrequent or “sealed for life”
- Oil lubrication is not practical
- Seal out liquid contaminants
- Minimize re-lube intervals
- Minimize leaks (housekeeping)
- Extreme applications — where oil doesn’t work

