



## OPTIMUS CSX-460

### PRODUCT DESCRIPTION:

Optimus CSX-460 is a high-performance, heavy-duty lubricating grease based on calcium sulfonate complex thickener system and high-quality heavy mineral base oil. A unique structure of calcium sulfonate complex thickener provides high dropping point, extraordinary extreme-pressure and anti-wear performances, excellent rust protection, superior mechanical stability and superior resistance against water washout.

### APPLICATIONS

Optimus CSX-460 grease is used in industrial equipment operating under unfavorable conditions involving water contamination, high loads and/or high temperatures, plain and rolling element bearings operating in corrosive environmental conditions, rolling mills, hot roll cables, continuous casters, ingot buggies and slab mills, steel mill roller bearings, conveyors and gears, marine and heavy mobile equipment exposed to salt water, paper machine wet- and dry-end bearings and hot calendar stacks, automotive wheel bearings and chassis parts.

### PRODUCT ADVANTAGES

- The operating temperature range is from -25 to 180°C
- High-load carrying capacity
- Good water resistance properties
- Good oxidation and thermal stability
- Good mechanical stability
- Good rust and corrosion protection
- Excellent EP and anti-wear properties

### TYPICAL PROPERTIES:

PARAMETERS	TEST METHODS	TYPICAL VALUE			
		0	1	1.5	2
NLGI Grade	-	0	1	1.5	2
Thickener Type	-	Calcium Sulfonate Complex			
Appearance	Visual	Smooth & Homogeneous			
Color	Visual	Brown			
Work Penetration @25°C	ASTM D217	355-385	310-340	305	265-295
Copper Strip Corrosion For 24hrs @100 °C	ASTM D4048	1b			
Dropping Point °C, Min	ASTM D2265	240	260	260	260
Water Washout Resistance %Wt. @79°C	ASTM D1264	1	1	1	0.5
Four Ball Weld Load, Kg, Min	ASTM D2596	500			
Four Ball, Wear Scar, dia, mm	ASTM D2266	max 0.6			
Operating Temperature Range °C	INTERNAL	-25 to 180			
Base Oil Viscosity @40°C (Cst)	ASTM D445	460	460	460	460

### HEALTH & SAFETY, ENVIRONMENT:

Prolonged and repeated contact with grease may cause skin disorders. Avoid contact. Wash immediately with soap and water. Do not discharge used grease in to drains or the environment. For further information on Safety Guidelines please refer to MSDS available on our website [www.lubrex.net](http://www.lubrex.net)

### HEALTH & SAFETY:

This product is not likely to present any significant health or safety hazards when properly used in the recommended application and good standards of personal hygiene are maintained. Reference is made to the Safety Data Sheet (SDS) which is available on request via your local sales office or via the internet [www.lubrex.net](http://www.lubrex.net)

### PROTECT THE ENVIRONMENT:

Comply with local regulation. Do not discharge into drains, soil or water.

### STORAGE:

We recommend to store all packages under cover. In case outside storage is unavoidable, drums should be laid horizontally to avoid the possible ingress of water and damage to drum markings. Products should never be stored above 60°C, exposed to hot sun or freezing conditions.

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