

## **ELBALUB 451,452**

Elbalub 451,452 Grease is high-viscosity base oil, lithium complex grease designed for the heavy-duty applications found in the construction and mining industry, as well as Cement, trucking and farming applications. Elbalub 451,452 Grease is heavy-duty grease offering high load capability, primarily due to containing high load base oil and synergistic combination of high quality additives. This grease also contains a tackiness additive to enhance retention on lubricant parts. In addition, it offers excellent structural and oxidation stability and high resistance to water washout.

Elbalub 451,452 Grease can be used wherever lithium greases are recommended or preferred, such as in suspension systems, wheel bearings, universal joints, ball joints and anti- friction plain bearings. Also, is well suited for multipurpose lubricant applications in the pulp and paper mill industry, such as paper machine wet ends, felt roll bearings and couplings and press sections.

## Characteristics:

- Highly loadable lubricant film
- Excellent wear protection
- Good water resistance
- Service temperatures up to 145°C
- Excellent adhesion and tacky.

## Application:

Especially for high-load rolling bearings operating at low to medium speeds such as for:

- Load rollers in rotary kilns for the cement industry,
- Crane wheels,
- Hammer crushers, hammer mills,
- Work rolls in hot strip mills,
- Ocld pilger rolling mills and rolling bearings subject to shock or pulsating stress.

Typical Performance Data			
Texture	Smooth,Tacky	Smooth, Tacky	Visual
NLGI Grade	1	2	ASTM D 217
Worked Penetration	310-340	265-295	ASTM D-217
Change in Pen after 100,000 strokes	+ 20	+ 20	
Drop Point , F	480 Min.	500 Min.	ASTM D 2265
Viscosity @ 40 C ,cSt	451	451	
Viscosity @ 100 C ,cSt	28.4	28.4	ASTM D 445
Viscosity @ 100 F ,SUS	2429	2429	
Viscosity @ 210 F ,SUS	140	140	
Type of thickener	Lithium	Lithium	-
4-Ball EP load, kg 4-Ball Wear @ 40 kgf,	complex	complex	ASTM D 2596
wear scar dia, mm	500	500	ASTM D 2266
Timken OK load , lbs	0.50 mm	0.50 mm	ASTM D 2509
Water washout @ 175 F,% wt	80	80	ASTM D 1264
Water Spray off, % wt	5.0	2.0	ASTM D 4049
Wheel Bearing Leakage	30 max.	10 max.	ASTM D 1263
Rust Test	6.0 Pass	3.0 Pass	ASTM D-1743

## For Technical, Quality or Product Safety Questions Please Contact:

Elba Lubrication Inc., New York / United States of America Phone + 1-631-759-1014 info@elba-lubes.com



