

## TRIAX SPHERON HT-2 CSX

#### EXTREME DUTY - HIGH TEMPERATURE -TACKY - CALCIUM SULFONATE COMPLEX GREASE

is a super high-performance, extreme-duty lubricating grease based on calcium sulfonate complex thickener, state-of-the-art additives, and balanced viscosity grade recommends this grease for a vast range of application. The very high dropping point, extraordinary extreme pressure film resistance and anti-wear performance of the lubricating film, the excellent mechanical stability and best in class water wash out and water spray off resistance, this grease is going to be of serious help to reduce overall maintenance costs and ultimately reduce the total cost of ownership of your mechanical equipment.

#### **APPLICATIONS**

- Recommended for wheel bearings, including disc brake applications, fifth wheels, u-joints, steering linkage, and chassis lubrication.
- An ideal chassis lubricant for "off road" equipment in agriculture, construction, logging, trucking and mining service where severe water washing or shock loading protection is needed.
- Also recommended for rock crushers, sand and gravel screens, oil field equipment, off shore drilling equipment and marine deck equipment.
- Recommended for industrial plain bearings and anti-friction bearings operating under shock-loads or wet and dirty conditions.
- NOTE: Extremely high adhesion make this grease harder to pump and may require the use of a heavy follower plate and/or more powerful pump in air operated grease pumping systems. Not recommended for centralized dispensing systems commonly found in industrial plants unless they are capable of pumping a grease of this type.

Specially formulated to meet the requirements in heavy-duty applications including construction, mining, quarries, cement, steel and paper industry, agriculture and forestry equipment and marine applications. Suitable for lubrication in the most severe conditions: under extremely high and shock loads, elevated temperatures and in wet environments.

#### **PERFORMANCE HIGHLIGHTS**

- Highest Timken load test in its class 70 lbs +
- Extremely Adhesive-tacky grease that "stays in place."
- · Unmatched water washout resistance due
- · Excellent protection against failures caused by shock loading.
- Extreme pressure protection Exceeds 70 pounds OK Load in the ASTM D-2509 Timken Test.
- · Critical metal surfaces of moving parts are protected from rust and corrosion.
- · Distinctive red color quickly identifies the grease and helps detect defective bearing seals.
- Reduced maintenance expense because "stay in place" attribute means less frequent greasing intervals and extended equipment life.
- $\cdot$  Oxidation inhibitors permit operations up to 180  $^\circ$  C (302  $^\circ$  F) for extended periods of time

### **CHEMICAL PROPERTIES**

NLGI 2 grade		
Test Parameter	Test Method	Value
Appearance	Visual	Tacky, Smooth and Homogenous
Color	Visual	RED
Thickener		Calcium Sulfonate Complex
Base Oil Viscosity at 40°C, mm <sup>2</sup> /s	EN ISO 3104	320
Base Oil Viscosity at 100°C, mm <sup>2</sup> /s	EN ISO 3104	22
NLGI Grade	ASTM D217	2
Operating Temperature Range		-30°C to 180°C
Cone Penetration, Worked, 0.1 mm	ISO 2137	265 – 295
Dropping Point, <sup>0</sup> C	ISO 6299	> 330 <sup>°</sup> C (626F)
Corrosive Effects on Copper, 24h at 100°C	ASTM D4048	> 1
Rust Test	ASTM D1743	Pass
Water Washout Test at 79ºC, wt.% loss	ISO 11009	< 2%
Four-Ball EP Test, Weld Point, kgf	ASTM D2596	600+
Four-Ball Wear Test, Wear Scar, mm	ASTM D2266	0.45

# CALCIUM SULFONATE vs LITHIUM COMPLEX

TRIAX high performance greases have made a total conversion to Calcium Sulfonate Complex (CSX), starting Nov 2022.

#### What does Calcium Sulfonate Complex offer that Lithium Complex does not?

Better thermal stability Improved EP load bearing capacity (30-50% higher) Extreme protection against water Much higher dropping point Improved mechanical stability