LUBRI-LOY

International Headquarters
150 Enterprise Drive
Wentzville, MO 63385
Phone 636•561•5007
Fax 636•561•5006
www.lubriloy.com

PRODUCT BULLETIN

IMPACT FG-CSC
CALCIUM SULFONATE COMPLEX #2

DESCRIPTION

Impact FG-CSC Calcium Sulfonate Complex #2 is an NLGI No. 2 high performance lubricating grease used where incidental contact with food is a possibility (H1). It also excels in applications where resistance to water washout and broad operating temperatures are absolutely necessary. The formulation of this product provides unsurpassed resistance to extreme pressures and corrosion, including salt spray. Impact FG-CSC Calcium Sulfonate Complex #2 also has exceptional mechanical stability even in the presence of water. It contains no heavy metals or other environmentally undesirable additives.

Impact FG-CSC Calcium Sulfonate Complex #2 can be applied from ambient temperatures of - 20° F to + 400° F (-29° C to + 204° C) depending on lubrication Impact FG-CSC Calcium Sulfonate Complex #2 has an operating range of - 40° F to + 400° F (- 40° C to + 204° C) once in the application. Follow equipment manufacturer's recommendations concerning lubrication frequencies.

Lubri-Loy Catalog#: 9014CSC, 9640CSC, 9192CSC, 97040CSC

• **Mechanical Stability** - Tests in the ASTM grease worker show virtually no change in consistency after 100,000 strokes, in addition, no significant change was observed in the conventional Shell Roll Test (D-1832). The Shell Roll test was modified from six hours at room temperature to 100 hours at 150°F, to increase the severity and again, no softening was observed.

• **Load Carrying Ability** - Timken values of 65 pounds OK load, LWI of 65 kg and weld point of 500 kg are typical for CSC Food Grade. Four Ball Wear tests (D-2266) also demonstrate the excellent lubricity of this product.

• **Oxidation Stability** - Bomb oxidation stability tests (D-942) produced pressure drops of only 1 PSI after 500 hours and 8 PSI after 1,000 hours. These values reflect the excellent resistance of Impact FG-CSC Calcium Sulfonate Complex #2 to oxidation.

• **Resistance to Water** - In a variation of the ASTM work stability test, Impact FG-CSC Calcium Sulfonate Complex #2 was mixed with 50% water and after working 100,000 strokes, remained virtually unchanged in consistency. Other premium greases run in this test tend to slump or break down.

Water Resistance - Impact FG-CSC Calcium Sulfonate Complex #2 has exhibited excellent adhesion, high water absorption and no sign of breakdown.

Water Washout (ASTM D-1264) - Impact FG-CSC Calcium Sulfonate Complex #2compares favorable to other greases in this test.

• **Corrosion Resistance** - In the Rust Test Rating (ASTM D-1743) CSC Food Grade passes this test and is equivalent to other premium greases. In a more severe version of this test, modified with synthetic sea water, CSC Food Grade still gives a pass rating.

TYPICAL PROPERTIES

N.L.G.I. Grade	#2
Color	Tan
Texture	Smooth
NLGI Grade	2
Penetration, Unworked ASTM D 217	265-295
Penetration, Worked 60 Strokes, ASTM D 217	265-295
Penetration Change, 100000 Strokes, FTM 791C 313.2	+/- 5 %
Wheel Bearing, ASTM D 1263, Modified 325°F (163° C)	0.4 Grams
Dropping Point, ASTM D 2265	+572° F (+300° C)
Oxidation Stability, ASTM D 942, 100 hours at 99° C	1 psi (7 kPa)
Four-Ball Wear, ASTM D 2266, 40 kg, 1200 RPM, 75°C, Scar mm	0.45 Max.
Four-Ball EP, Weld Point, ASTM D 2596, kgf	620
Timken OK Load, ASTM D 2509, Pounds	65
Copper Strip Corrosion, ASTM D 4048	1a
Corrosion Preventive Properties, ASTM D 1743	Pass
Oil Separation, ASTM D 1742	0.2 %
Water Washout, ASTM D 1264 , 175°F (79° C), % Loss	2.75
Low Temperature Torque, ASTM D 1478, - 40° F (- 40° C), gram-cm	<5,000
Salt Fog Test, B-117, hours	+2,500
Base Fluid Properties:	
Viscosity @ 100° C, ASTM D 445, Centistokes	10.8
Viscosity @ 40° C, ASTM D 445, Centistokes	100
Viscosity @ 210° F, ASTM D 2161, SUS	63
Viscosity @ 100° F, ASTM D 2161, SUS	523
Viscosity Index, ASTM D 2270	90
Pour Point, ASTM D 97	- 12° C Max.
Flash Point, ASTM D 92	220° C