C I T G O L I T H O P L E X® G R E A S E S

Date 01/04

DESCRIPTION: The CITGO Lithoplex® Grease family represents the latest technology in greases. All Lithoplex® greases contain extreme pressure (EP) additives. They are suitable for use at higher temperatures than conventional greases.

QUALITIES: CITGO Lithoplex® Greases of all grades and types are multipurpose greases incorporating the following characteristics:

Excellent Work Stability – Extremely stable lithium complex formula retains its consistency even in the most severe service.

Oxidation and Rust Resistance – Special additives protect machinery components from rust and corrosion, thereby extending equipment service life in the presence of moisture or high temperatures.

Extreme Pressure and Anti-Wear Protection – Additives provide excellent extreme pressure and anti-wear protection under severe conditions.

APPLICATIONS: **Lithoplex® MP** greases are compatible with conventional lithium soap greases. They contain extreme pressure (EP) additives and molybdenum disulfide (moly) to minimize wear in heavily-loaded components. These greases satisfy a wide range of industrial and automotive applications including bearings, ball joints and bushings. Three NLGI consistencies are available.

Lithoplex® CM greases contain moly – three percent – to meet equipment manufacturer's requirements. Polymer imparts an adhesive quality and provides improved water resistance. For severely shock-loaded components such as those found in construction and mining, the additional moly provides an extra margin of protection against wear. Applications include construction and mining equipment, fifth wheels, etc.

Lithoplex® HM greases are designed to provide excellent protection under extreme conditions and high-temperature applications. They contain five percent moly in addition to rust and corrosion inhibitors to protect machinery components, thereby extending equipment service life in the presence of moisture or high temperatures. Applications include construction and mining equipment, industrial equipment, fifth wheels, etc.

Lithoplex® RT greases were developed for applications where an especially tenacious grease is needed. Their red color and tacky, moly-free formula make them ideal for higher-temperature or problem applications. They are excellent for use in industrial equipment in which an adhesive grease is preferred.

Lithoplex® ST is a high-temperature grease offering exceptional water resistance, and is specifically designed to serve well in steel mill applications where equipment may be exposed to excessive amounts of water. It has a heavy base oil for good film protection, to accommodate shock loads, and to maintain consistency.

Lithoplex® MP 1, MP 2, RT 1 and **RT 2** meet the ASTM D 4950 requirements for Wheel Bearing Grease Category GC and Chassis Grease Category LB. Labels display the NLGI Certification Mark for Automotive Wheel Bearing & Chassis Lubricant shown here.

NATIONAL LUBRICATING GREASE INSTITUTE
NLGI
AUTOMOTIVE WHEEL BEARING & CHASSIS LUBRICANT
GC-LB

TYPICAL PROPERTIES:

CITGO LITHOPLEX® GREASES

	MP			CM		HM			RT		ST
NLGI Grade	**0**	**1**	**2**	**1**	**2**	**0**	**1**	**2**	**1**	**2**	**2**
Material Code	655342001	655341001	655340001	655351001	655352001	655355001	655356001	655357	655343001	655344001	655367001
Color, appearance	Gray	Gray	Gray	Gray/Black	Gray/Black	Gray/Black	Gray/Black	Gray	Red	Red	Dark Green
Texture	Smooth	Smooth	Smooth	Adhesive	Adhesive	Tacky	Tacky	Stringy	Tacky	Tacky	Buttery
Penetration, ASTM D 217, 60 strokes	355-385	310-340	265-295	310-340	265-295	355-385	310-340	265-295	310-340	265-295	275-295
Four-Ball EP, Weld, ASTM D 2596, kgs.	315	315	315	400	400	500	500	500	250	250	500
Load Wear Index, Kgf	55	58	58	64	64	64	64	64	48	48	62
Four-Ball Wear, mm Scar, ASTM D 2266											
40 kgs. load	0.50	0.45	0.45	0.40	0.45	0.45	0.40	0.40	0.42	0.42	0.40
Rust Prevention Test, ASTM D 1743	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Water Resistance, 175˚F, ASTM D 1264,											
% Loss	8.3	5.0	2.0	2.0	2.0	–	2.0	7.5 max.	5.3	2.0	1.4
Dropping Point, ASTM D 2265, ˚F	–	500	550	500	550	–	500	500	500	550	430
Base Fluid Viscosities											
cSt at 40˚C	232	232	232	286	376	376	376	376	533	533	540
cSt at 100˚C	17.7	17.7	17.7	21.9	26.1	26.1	26.1	–	37.4	37.4	30
Molybdenum Disulfide	0.5	0.5	0.5	3.0	3.0	5.0	5.0	5.0	–	–	–