



PRODUCT DATA SHEET

CIRO R&O CIRCULATING OIL

INDUSTRIAL GRADE

Product Description

TOYO-G CIRO series are specially formulated from high quality pure base stocks and selected additives package to ensure optimum lubricating performance for the demand of steel mill bearings and circulating oil system where extreme water contamination can occur. It provides excellent hydrolytic stability, oxidation stability, good thermal stability and foam resistance as well as protection against rust and corrosion.

TOYO-G CIRO series are fortified with added special advance additives package that provides strong water separation and good in non-ferrous metal corrosion protection.

It provides high level of protection against wear and it is good in Morgan No-Twist Rod Mills.

Product Specifications & Performance meet

Morgoil® Lubricant [TOYO-G CIRO 90]

Morgoil® Advanced Lubricant (Super Demulsibility)

TYPICAL PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	CIRO 90	CIRO 150	CIRO 220
FLASH POINT °C	ASTM D-93	262	264	266
VISCOSITY INDEX	ASTM D-2270	101	103	102
POUR POINT °C	ASTM D-97	-23	-21	-16
KINEMATIC VISCOSITY				
40 °C mm ² /s (cSt)	ASTM D-445	91	146	217
100 °C mm ² /s (cSt)	ASTM D-445	10.7	14.8	18.3
COPPER STRIP CORROSION	ASTM D-130	1A	1A	1A
PROPERTY	TEST METHOD	CIRO 320	CIRO 460	CIRO 680
FLASH POINT °C	ASTM D-93	266	267	268
VISCOSITY INDEX	ASTM D-2270	99	93	83
POUR POINT °C	ASTM D-97	-13	-12	-10
KINEMATIC VISCOSITY				
40 °C mm ² /s (cSt)	ASTM D-445	311	455	666
100 °C mm ² /s (cSt)	ASTM D-445	23.9	29.5	34.8
COPPER STRIP CORROSION	ASTM D-130	1A	1A	1A

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Other Information

Safety Data Sheet

Safety data sheet can be requested via website www.toyointernational.com or you may also can get them from your local agent / supplier.

SDS Number: Kindly refer to the following

Storage and Handling

This product shall be ideally stored in a cool, dry location in unopened containers. Suggested temperature between 8°C to 28°C (46°F to 82°F) unless otherwise labeled.

Stirring is recommended in order to prevent ingredients from separating.

Shelf Life

With good practicing on storage, the minimum shelf life from the batch number approx. 3 years or 36 months

Condition of the product must in the unopened original container

Available Packing Sizes

		Part Number # CIRO 90	[SDS # LP17-13]
Pail	18 liter	8696L-1347	
Drum	209 liter	8696L-1348	
		Part Number # CIRO 150	[SDS # LP17-14]
Pail	18 liter	8696L-1349	
Drum	209 liter	8696L-1350	
		Part Number # CIRO 220	[SDS # LP17-15]
Pail	18 liter	8696L-1351	
Drum	209 liter	8696L-1352	
		Part Number # CIRO 320	[SDS # LP17-16]
Pail	18 liter	8696L-1353	
Drum	209 liter	8696L-1354	
		Part Number # CIRO 460	[SDS # LP17-17]
Pail	18 liter	8696L-1355	
Drum	209 liter	8696L-1356	
		Part Number # CIRO 680	[SDS # LP17-18]
Pail	18 liter	8696L-1357	
Drum	209 liter	8696L-1358	

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