

# **Unionplast R-EP**

### HIGH PERFORMANCE SYNTHETIC-BASED GEAR LUBRICANTS

#### **DESCRIPTION**

Lubricating oil to synthetic component, with strong characteristis ' EP, antiwear and antioxidants, intended for "Long-Life" lubrication of gearboxes, gears in general and suppports, operating under severe load and temperature conditions.

They are highly recommended whenever it is important to prevent *micro-pitting* problems.

Aluchem products and plants have been also **Kosher** certified.

#### **PROPERTIES**

**Unionplast R-EP** are derived from the latest generation of high performance components, to provide outstanding anti-wear, antioxidant and EP properties, coupled with much longer oil drain periods compared with traditional EP gear oils.

The peculiar nature and properties of the special ingredients, including ashless additives, ensure a very high level of cleanliness, superior oil film strength and enhanced oiliness.

**Unionplast R-EP** are specially formulated to prevent the development of *micro-pitting*, with performance corresponding to the levels set by *Flender AG*.

**Unionplast R-EP** are fully compatible with elastomers and sealing materials normally found in gearboxes. They are also fully compatible and miscible in all proportions with all sorts of mineral and synthetic gear lubricants, with the only exception of those based on polyalkylene glycols (PAG) and silicon fluids.

#### **APPLICATION**

**Unionplast R-EP** are suitable for all gears where the manufacturer expects the use of 'EP' oils (extreme pressures). Recommended for gears of all types, straight tooth, helical, spiroid, cylindrical or conical wheels, worms (also With steel / cast iron coupling) and epicycloid reduction.

They are also ideal for rolling bearings and bronzes of all types and sizes and for circulating lubricants and oil baths in general.

### **SPECIFICATIONS**

**Unionplast R-EP** exceeds the following specifications:

ISO 12925-1 Type CKD ANSI / AGMA 9005-E02 (EP) US Steel 224

Flender AG

David Brown S1.53.101 DIN 51517-3 (CLP)

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properties nor does it release the user from the obligation of performing preliminary tests with the selected.

UNI EN ISO 9001,2015

UCHEM S.D.A.

The data in this product information is based on our general experience and knowledge. It constitutes neither an assurance of product





# **Unionplast R-EP**

Property	Method	Unit	Typical Data							
ISO VG	ASTM D 2422	-	68	100	150	220	320	460	680	1000
Kinematic Viscosity at 40°C	ASTM D 445	mm²/s	67,82	100,9	151,4	225,9	318,9	464,5	680,9	1048
Kinematic Viscosity at 100°C	ASTM D 445	mm²/s	8,71	11,45	15,12	19,92	25,38	35,29	46,55	61,89
Viscosity Index	ASTM D 2270	-	100	100	100	101	103	114	117	118
Flash Point C.O.C	ASTM D 92	°C	240	245	247	250	253	255	258	260
Pour Point	ASTM D 97	°C	- 27	- 27	- 24	- 24	- 24	-21	-21	-21
TAN Total Acid Number	ASTM D 664	mg KOH/g	1,38	1,43	1,39	1,47	1,45	1,42	1,40	1,44
4-Ball Test, wear scar diameter	ASTM D 2266	mm	<0,4							
4-Ball Test, welding load	ASTM D 2783	Kg	> 250							
FZG Wear Test	DIN 51.354	-	12th Stage pass							
Operating temperature range	-	°C	Steady state: 180°C - Peaks: 200°C							
Specific gravity at 20°C	ASTM D 1298	g/cm <sup>3</sup>	0,880	0,890	0,895	0,900	0,905	0,905	0,915	0,915
Foaming Test, Sequence I,II	ASTM D 892	ml/ml	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0

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