



The Elco Corporation

1000 Belt Line Street, Cleveland, Ohio 44109-2800 USA  
www.elcocorp.com • Tel (216) 749-2605 • Fax (216) 749-7462

## Elco 154 Antiwear Hydraulic Fluid Additive

### Features

Elco 154 is a multifunctional universal additive for use in preparing premium antiwear hydraulic fluids. When formulated in a suitable base stock, Elco 154 imparts these benefits:

- Extended oil life and pump durability
- Antiwear and EP performance
- Imparts excellent filterability and demulsibility characteristics
- Excellent thermal and oxidation stability
- Compatible in Group I, II, III and IV base stocks

### Application

Treated at 0.55% volume (0.65% weight) in suitable base stocks, Elco 154 meets or exceeds the requirements of:

- Denison HF-0
- Cincinnati Milacron P-68, P-69, P-70
- U.S. Steel 127, 136
- AFNOR NFE 48-603
- GM LS-2
- Sauer-Sundstrand
- Meets DIN 51524 Part II @ (0.4% vol ----0.5% wt)
- Vickers M-2950-S & I-286-S

### Characteristics

#### Physical

Flash Point  
Specific Gravity  
Viscosity @ 40° C

#### Typical

130°C min  
1.08 (9.0 lb/gal)  
250 cSt

#### Chemical

Phosphorus  
Sulfur  
Zinc

5.0 %  
10.5%  
5.7 %

### Recommended Blending, Handling and Storage Conditions

Elco 154 can be blended with mechanical or in-line blending equipment at temperatures not above 140°F or below 60°F. The additive can be heated to 140°F. for unloading or transfer, but should not be stored for long periods at temperatures over 120°F.

# Elco 154

## Antiwear Hydraulic Fluid Additive

### Performance Characteristics

Characteristics	ASTM Test Method	Equilon Grp1 ISO VG 46 ELCO 154 0.65% wt	Chevron RLOP Grp 2 ISO VG 32 ELCO 154 0.65% wt	Petro- Canada Grp 2 ISO VG 46 ELCO 154 0.65% wt	Exxon SEN Grp1 ISO VG 46 ELCO 154 0.65% wt
<b>Demulsibility</b> mL oil-water-emulsion (min)	D 1401	42-38-0 (10)	43-37-0 (5)	42-38-0 (10)	43-37-0 (10)
<b>AFNOR Filterability</b> 0.8 micron filter, 300 mL FI 0.2% water, 96 hours @ 70°C FI wet	AFNOR	1.05  1.18	1.11  1.25	1.22  1.48	1.09  1.13
<b>Foam</b> Sequence I Sequence II Sequence III	D 892	20/0 5/0 10/0	30/0 10/0 0/0	0/0 0/0 10/0	30/0 10/0 0/0
<b>Copper Corrosion</b>	D 130	1b	1b	1b	1b
<b>Hydrolytic Stability</b> Cu wt loss, mg/cm <sup>2</sup> Water Acidity	D 2619	0.06 Basic	0.06 Basic	0.09 Basic	0.09 Basic
<b>Oxidation</b> Hrs to 2.0 NNA	D 943	4500+	2500+	4500+	2500+
<b>Steel Corrosion</b>	D 665B	Pass	Pass	Pass	Pass
<b>Thermal Stability</b> Condition of Cu rod Condition of Steel rod Cu rod weight loss, mg Cu rod sludge deposit, mg Sludge deposit in oil, mg	D 2070	2 2 1.7 3.7 0	1 1 2.2 2.4 0	2 1 1.1 1.5 0	2 1 1.3 3.9 0
<b>FZG</b>	DIN 51354			D/L 11	

Rev. 8/04