

# BREOX 50A 1000

## INTRODUCTION

**BREOX 50A 1000** is a water soluble monol initiated, ethylene oxide/propylene oxide co-polymer manufactured to provide a viscosity of 1000 cSt @ 40°C.

These product finds extensive application when manufacturing and formulating various water soluble lubricants, for example:

- Gear, Bearing and Calender lubricants
- Compressor lubricants
- Metal working formulations

## TYPICAL PHYSICAL PROPERTIES

		<b>50A 1000</b>
<b>Viscosity</b>	<b>cSt @ 40°C</b>	1000
<b>Viscosity</b>	<b>cSt @ 100°C</b>	163
<b>Viscosity Index</b>	<b>ASTM D 2270</b>	281
<b>Pour point, °C</b>	<b>ASTM D 97</b>	-39
<b>Refractive Index</b>	<b>N<sup>20</sup> D</b>	1.46
<b>Specific Gravity</b>	<b>20 / 20°C</b>	1.06
<b>Flash Point, °C</b>	<b>COC</b>	230
<b>Vapour Pressure</b>	<b>mm Hg 20°C</b>	<0.001
<b>Water Content</b>	<b>% by wt</b>	<0.25
<b>Specific Heat</b>	<b>kJ / kg K</b>	1.95
<b>Ash</b>	<b>ASTM D 482</b>	<0.01
<b>Surface Tension, 20°C</b>	<b>Dynes / cm</b>	35 – 40

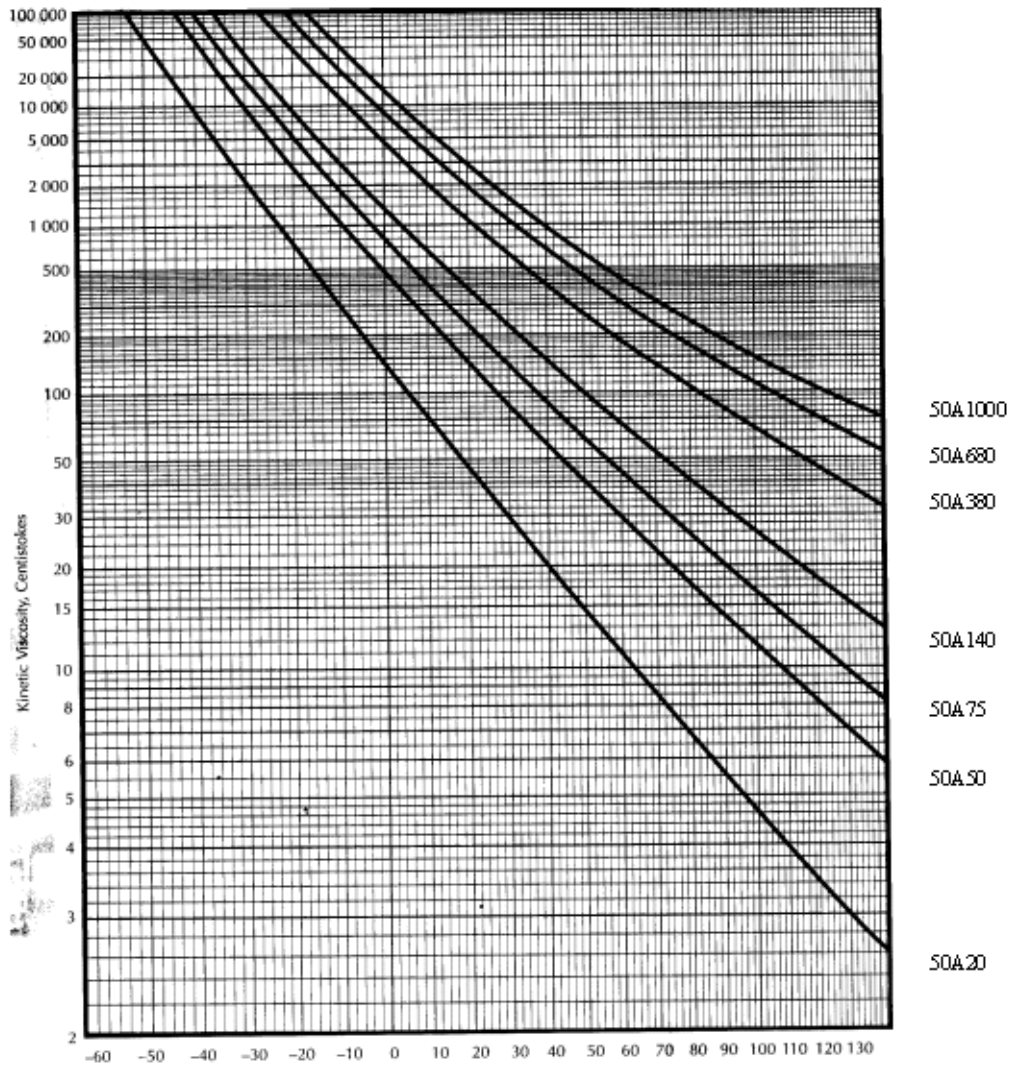
		<b>50A 1000</b>
<b>Natural</b>	% Linear Swell	3
	Hardness Change	3
<b>Styrene Butadiene (SBR)</b>	% Linear Swell	-0.8
	Hardness Change	2
<b>Nitrile Butadiene (NBR)</b>	% Linear Swell	-0.8
	Hardness Change	1
<b>Isobutene Isoprene (IIR) 1</b>	% Linear Swell	0
	Hardness Change	2
<b>Isobutene Isoprene (IIR) 2</b>	% Linear Swell	-1.5
	Hardness Change	4
<b>Chloroprene</b>	% Linear Swell	0

	Hardness Change	-1
<b>Silicone</b>	% Linear Swell	0
	Hardness Change	-1

**BREOX 50A 1000** is FDA compliant and may therefore be used in relevant applicants where incidental food contact may occur. The table below summarises this in accordance with 21 CFR.

	<b>50A 1000</b>
<b>173.310</b>	•
<b>173.340</b>	•
<b>175.105</b>	•
<b>176.200</b>	•
<b>176.210</b>	•
<b>177.1200</b>	•
<b>178.3120</b>	•
<b>178.3570</b>	•
<b>178.319 0</b>	•

### **VISCOSITY vs. TEMPERATURE BEHAVIOUR**



## Remarks

**Handling & Safety:**

**Storage:**

**Revision-No.**

2.2-08.2004 Effective August 17, 2004

The product can be stored for at least 2 years at ambient storage conditions and temperature without any deterioration.

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