

# BREOX BIO 46

## INTRODUCTION

Polyalkylene glycols (PAGs) have traditionally been regarded as non biodegradable, or only partially biodegradable using standard methods of test such as OECD 301 Ready Biodegradability. However, in all other respects, PAGs are generally regarded as "environmentally less harmful" products – exhibiting low toxicity to mammals, fish, microbial and plant life, together with little or no tendency to bioaccumulate. **BREOX Bio 46** is an "environmentally less harmful" polyalkylene glycol which also exhibits ready biodegradability in accordance with standard methods of test.

## APPLICATION

**BREOX Bio 46** is a high performance basefluid designed for use in industrial applications which require an environmentally sensitive lubricant. **BREOX Bio 46** demonstrates excellent lubricity over a wide temperature range and may be formulated to suit a range of applications, including those where a water soluble basefluid is particularly required. **BREOX Bio 46** has a high viscosity index and good low temperature properties so may be used to replace two or more mineral oil based products. Typical applications are those where a high degree of environmental sensitivity is required, such as forestry equipment, low viscosity lubricants, textile lubricants and hydraulic fluids. It is soluble in water giving it potential applications in metal working fluids, and may be thickened for potential use in higher viscosity lubricants and greases.

## TYPICAL PROPERTIES

	Typical	Analysis Method
Viscosity (20°C), cSt	120.4	ASTM D445
Viscosity (40°C), cSt	43.50	ASTM D445
Viscosity (100°C), cSt	7.26	ASTM D445
Viscosity Index	141	ASTM D2270
Pour point, °C	<-37	ASTM D97
Density at 20°C, g/ml	1.05	ASTM D1298
Flash point, °C	225.00	ASTM D92
Cloudpoint (1% aqueous), °C	>90	ASTM D2024
Refractive Index, ND/20	1.461	ASTM D1218
Water solubility	Complete	-
Biodegradability, bod10/cod, %	60%	(OECD 301c Miti test)

## Remarks

For all relevant health and safety data and handling

**Handling & Safety:**

information, reference is made to the Material Safety Data Sheet (MSDS) for this product, additional copies of which are available on request.

**Storage:****Revision-No.**

2.3-08.2004 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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