

# **BREOX 43A 1000**

## **INTRODUCTION**

**BREOX 43A 1000** has recently been introduced as an alternative product to **BREOX 50A 1000**, and offers equivalent properties and performance characteristics.

Further to recent revision of the classification of Butanol initiated 50/50 (wt/wt) EO:PO type polyalkylene glycols (**BREOX** “50A” type), in compliance with the criteria of the European Dangerous Substances Directive, **BREOX 43A 1000** has been introduced to offer a label free alternative to the higher molecular weight material in the range. The ECETOC report reviewed data on polyalkylene glycols, including the butanol initiated 50/50 EO/PO copolymers, and dependant on molecular weight, some showed evidence of lung toxicity, including mortalities of rats acutely exposed to aerosols by inhalation.

The Directive concerning “50A” type polyalkylene glycols takes account only of the hazard potential, no account is taken of the risk potential based upon current use patterns. **BREOX 50A** type products exhibit a low order of toxicity by other routes of exposure, including ingestion and skin absorption, and when used in accordance with accepted industrial practises and in accordance with product literature, they can be, and have been, used safely for decades. The majority of applications, where no aerosol is generated, are unaffected by this change and the products can continue to be used safely. In some instances where an aerosol may be generated, procedures can be implemented to prevent generation and/or exposure and the product **BREOX 43A 1000** is available as an ISO 1000 grade alternative to **BREOX 50A 1000**. **BREOX 43A 1000** is also available as a suitable alternative to **BREOX 50A 1000** in any application area where a non-labelled product would be preferred.

## **APPLICATION**

**BREOX 43A 1000** is a water soluble lubricant base fluid suitable for a range of industrial lubricant applications, and may be used as a direct substitute for **Breox 50A 1000** in all such application areas. **BREOX 43A 1000** is fully compatible with the 50A range and may be blended to intermediate viscosity grades using label-free lower viscosity grades from the **Breox 50A** range. As with the 50A grades, **BREOX 43A 1000** offers:

- Excellent resistance to weight loss under oxidising conditions, with minimal residue formation on oxidation.
- When fully formulated, excellent resistance to loss of viscosity under oxidising conditions and high shear.
- Very high Viscosity Index.

Good water solubility at temperatures below 48°C.

## TYPICAL PROPERTIES

The typical values presented here are believed to be accurate, they should not however be considered to constitute a specification.

Physical Attribute	Analysis Method	Value and Unit
Viscosity @40°C	ASTM 445	1050cSt
Density	ASTM D 1298	1060kg/m <sup>3</sup>
Flash Point	ASTM D 92	>200°C
Cloud Point	ASTM D2500	48°C
Pour Point	ASTM D 97	-36°C
VI	-	280

## Remarks

### Handling & Safety:

A material Safety Data Sheet (MSDS) has been issued describing the health, safety and environmental characteristics of BREOX 43A 1000 together with handling precautions and emergency procedures. This must be consulted and fully understood before storage, handling and use.

### Storage:

### Revision-No.

3.2-08.2004 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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