

# **BREOX IL 460 SW**

## **INTRODUCTION.**

**BREOX** Industrial Lubricant SW Grades are a range of Polyalkylene Glycol based synthetic lubricants, which provide outstanding load carrying properties and excellent thermal stability. They have been purpose designed to provide excellent corrosion protection (ASTM D665, procedure B pass) and demulsibility characteristics (according to ASTM D1401).

## **APPLICATION**

**BREOX** Industrial Lubricants SW Grades allow thermally stable operation at temperatures in excess of 200 °C. Typical applications include lubrication of calenders, piston compressors, and bevel, spiral bevel, helical, enclosed spur, and worm gear units. The lubricants are free of chlorine, sulphur and metal based additives including lead. They remain homogeneous from below their pour point to temperatures in excess of 250 °C. The anticipated service lifetime of all grades is substantially in excess of 10,000 hours at 100 °C. In industrial enclosed gear units, the performance allows for extended drain intervals and, in some cases, for operation as a "Fill for Life" lubricant.

## **APPROVALS**

General approval has been given for this lubricant range as a Type G lubricant in David Brown industrial enclosed gear units.

Furthermore **BREOX IL 460 SW** meet the requirements set down under Defence Standard 05-50.1, No 29.

## Physical and Performance Data

BREOX	IL 460 SW
Kinematic Viscosity (1P71) cSt @ 40 °C cSt @ 100 °C	433 63,7
Viscosity Index (IP 226)	220
Pour Point. °C (IP 15)	-28
PMCC Flash Point. °C (IP 34)	225
Neutralisation, mgKOH/g (IP 139)	1.15
Specific gravity @ 20/20 °C (IP 160)	1.007
Oxidation stability Total Oxidation Products. % (IP 280)	.500
Load carrying capacity FZG failure load (IP 334. A/8.3/90)	>13
Timken OK Load. lbs. (ASTM D2782)	35
Weld Load, kg (ASTM D2783)	170
Corrosion, Copper Strip classification, 3 hrs. @ 100 °C (IP 154)	1a
Corrosion (IP 135), Rust Prevention. Procedure A Procedure B	Pass Pass
Volume of Foam, ml Sequence 1 Sequence 2 Sequence 3	nil/nil nil/nil nil/nil
Air Release (ASTM 3427) min @ 90 °C	25
Demulsibility (ASTM D1401) @ 82 °C Emulsion (ml) Free Water (ml)	0 40

## FLUSH PROCEDURES

When changing from mineral oil to a **BREOX** Industrial Lubricant the following procedure should be followed:

- The system should be run until the mineral oil is warm, then it is drained as fully as possible, particular attention being paid to reservoirs, lines etc., where oil may be trapped. The system should be cleaned of residual sludge.
- Flush the system with the minimum quantity of **BREOX** Industrial Lubricant by operating under no load, then drain the system whilst fluid is warm. Repeat if necessary.
- Seals, etc., should be inspected and if deteriorated then replaced. Seals previously exposed to mineral oil may shrink when exposed to **BREOX** Industrial Lubricants, and therefore it may be advantageous to replace them. The system is then filled with Breox Industrial Lubricant. It is useful to inspect the lubricant after one or two days in use to make sure that it is free of extraneous materials. Contamination with significant

quantities of other lubricants can, in some cases, lead to sludging, foaming and other problems.

## **Remarks**

### **Handling & Safety:**

For all relevant health and safety data and handling 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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