



“LUBRICATING OIL ANALYSIS”

Immersion experiment report

Laboratory SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd
OGC Shanghai Test Centre-Lube Lab
Report date 17th Apr. 2024

ALL RIGHTS RESERVED

The copyright of this document, which contains information of a proprietary nature, is vested SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. The content of this document may not be used for purposes other than that for which it has been supplied and may not be reproduced, either wholly or in part, in any way whatsoever nor may it be used by, or its content divulged to, any other person whomsoever without the prior written permission of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd
© SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd



Table of Content

1. Sample Information
2. Operating procedure (provided by the customer)
3. Results and photos



1. Sample Information

Material name: Gear box sightglass cover after application of Loctite sealant and air drying, O-Ring, Seal, Thrust washer, BoWex 38M Nylon.

Sample name: Shell320+1%W100, Mobil320+1%W100, Fuchs320+1%W100, Castrol320+1%W100.

Other information: /

Received: 11/03/2024

Analysed: 12/03/2024-09/04/2024

2. Operating procedure (provided by the customer)

- Photographs were taken of the surface condition of the material prior to immersion in the sample.
- The 5 materials were sequentially infiltrated into each sample and tested at room temperature for 72 hours.
- After the test is completed, the material will be taken out and drained, and the surface of the material will be photographed to determine whether there is any change, if there is no change, then it will be immersed into the next sample to continue the test.



















Immersion experiment report


Report No: S024-03766





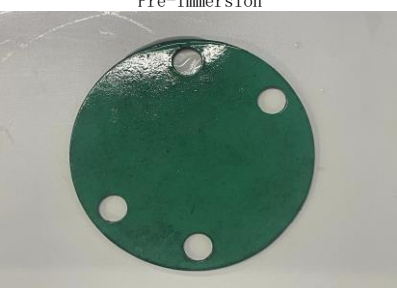



3 . Results and photos

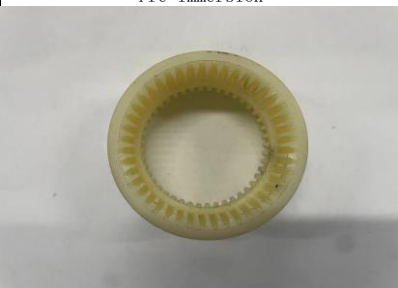





Immersion experiment			
Number	Material name	Sample name	Immersion results
1	Gear box sightglass cover after application of Loctite sealant and air drying	Shell320+1%W100	No significant changes in appearance
		Mobil320+1%W100	No significant changes in appearance
		Fuchs320+1%W100	No significant changes in appearance
		Castrol320+1%W100	No significant changes in appearance
2	O-Ring	Shell320+1%W100	No significant changes in appearance
		Mobil320+1%W100	No significant changes in appearance
		Fuchs320+1%W100	No significant changes in appearance
		Castrol320+1%W100	No significant changes in appearance
3	Seal	Shell320+1%W100	No significant changes in appearance
		Mobil320+1%W100	No significant changes in appearance
		Fuchs320+1%W100	No significant changes in appearance
		Castrol320+1%W100	No significant changes in appearance
4	Thrust washer	Shell320+1%W100	No significant changes in appearance
		Mobil320+1%W100	No significant changes in appearance
		Fuchs320+1%W100	No significant changes in appearance
		Castrol320+1%W100	No significant changes in appearance
5	BoWex 38M Nylon	Mobil320+1%W100	No significant changes in appearance
		Fuchs320+1%W100	No significant changes in appearance
		Castrol320+1%W100	No significant changes in appearance
Note: The immersion experiments are all provided by customers.			

Material name:Gear box sightglass cover after application of Loctite sealant and air drying		
Sample name:Shell320+1%W100		
Test condition:After 72h of immersion at room temperature, visually inspect the surface of the test piece under natural light.		
Pre-immersion	After immersion	Immersion results
		No significant changes in appearance
Material name:Gear box sightglass cover after application of Loctite sealant and air drying		
Sample name:Mobil320+1%W100		
Test condition:After 72h of immersion at room temperature, visually inspect the surface of the test piece under natural light.		
Pre-immersion	After immersion	Immersion results
		No significant changes in appearance
Material name:Gear box sightglass cover after application of Loctite sealant and air drying		
Sample name:Fuchs320+1%W100		
Test condition:After 72h of immersion at room temperature, visually inspect the surface of the test piece under natural light.		
Pre-immersion	After immersion	Immersion results
		No significant changes in appearance
Material name:Gear box sightglass cover after application of Loctite sealant and air drying		
Sample name:Castrol320+1%W100		
Test condition:After 72h of immersion at room temperature, visually inspect the surface of the test piece under natural light.		
Pre-immersion	After immersion	Immersion results
		No significant changes in appearance

Material name:O-Ring		
Sample name:Shell320+1%W100		
Test condition:After 72h of immersion at room temperature, visually inspect the surface of the test piece under natural light.		
Pre-immersion	After immersion	Immersion results
		No significant changes in appearance
Material name:O-Ring		
Sample name:Mobil320+1%W100		
Test condition:After 72h of immersion at room temperature, visually inspect the surface of the test piece under natural light.		
Pre-immersion	After immersion	Immersion results
		No significant changes in appearance
Material name:O-Ring		
Sample name:Fuchs320+1%W100		
Test condition:After 72h of immersion at room temperature, visually inspect the surface of the test piece under natural light.		
Pre-immersion	After immersion	Immersion results
		No significant changes in appearance
Material name:O-Ring		
Sample name:Castrol320+1%W100		
Test condition:After 72h of immersion at room temperature, visually inspect the surface of the test piece under natural light.		
Pre-immersion	After immersion	Immersion results
		No significant changes in appearance

Material name:Seal		
Sample name:Shell320+1%W100		
Test condition:After 72h of immersion at room temperature, visually inspect the surface of the test piece under natural light.		
Pre-immersion	After immersion	Immersion results
		No significant changes in appearance
Material name:Seal		
Sample name:Mobil320+1%W100		
Test condition:After 72h of immersion at room temperature, visually inspect the surface of the test piece under natural light.		
Pre-immersion	After immersion	Immersion results
		No significant changes in appearance
Material name:Seal		
Sample name:Fuchs320+1%W100		
Test condition:After 72h of immersion at room temperature, visually inspect the surface of the test piece under natural light.		
Pre-immersion	After immersion	Immersion results
		No significant changes in appearance
Material name:Seal		
Sample name:Castrol320+1%W100		
Test condition:After 72h of immersion at room temperature, visually inspect the surface of the test piece under natural light.		
Pre-immersion	After immersion	Immersion results
		No significant changes in appearance

Material name:Thrust washer		
Sample name:Shell320+1%W100		
Test condition:After 72h of immersion at room temperature, visually inspect the surface of the test piece under natural light.		
Pre-immersion	After immersion	Immersion results
		No significant changes in appearance
Material name:Thrust washer		
Sample name:Mobil320+1%W100		
Test condition:After 72h of immersion at room temperature, visually inspect the surface of the test piece under natural light.		
Pre-immersion	After immersion	Immersion results
		No significant changes in appearance
Material name:Thrust washer		
Sample name:Fuchs320+1%W100		
Test condition:After 72h of immersion at room temperature, visually inspect the surface of the test piece under natural light.		
Pre-immersion	After immersion	Immersion results
		No significant changes in appearance
Material name:Thrust washer		
Sample name:Castrol320+1%W100		
Test condition:After 72h of immersion at room temperature, visually inspect the surface of the test piece under natural light.		
Pre-immersion	After immersion	Immersion results
		No significant changes in appearance

Material name:BoWex 38M Nylon		
Sample name:Mobil320+1%W100		
Test condition:After 72h of immersion at room temperature, visually inspect the surface of the test piece under natural light.		
Pre-immersion	After immersion	Immersion results
		No significant changes in appearance
Material name:BoWex 38M Nylon		
Sample name:Fuchs320+1%W100		
Test condition:After 72h of immersion at room temperature, visually inspect the surface of the test piece under natural light.		
Pre-immersion	After immersion	Immersion results
		No significant changes in appearance
Material name:BoWex 38M Nylon		
Sample name:Castrol320+1%W100		
Test condition:After 72h of immersion at room temperature, visually inspect the surface of the test piece under natural light.		
Pre-immersion	After immersion	Immersion results
		No significant changes in appearance

Report Comment:

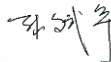
The test results are responsible for the incoming samples only.

The test report shall only be used for clients' scientific research, teaching, internal quality control, product research and development, etc... and just for internal reference.

Tested by:



Checked by:



Approved by:



Date: 17/04/2024

Date: 17/04/2024

Date: 17/04/2024

END