



TEST REPORT

Chemical resistance of materials

ECOLAB Standard (method 40-1 / 06.2020 Rev. 6 / COP)

Protocol


Protocol No.: 6053-22-GG-22-PP001

Tested by (+ signature).....: Großer

Approved by (+ signature).....: R. Schubert

Date of issue.....: 29.11.2022

Contents: 12 pages


.....
R. Schubert

Testing laboratory

Name: SLG Prüf- und Zertifizierungs GmbH

Address.....: Burgstädter Straße 20, 09232 Hartmannsdorf, Germany

Test location: as above

Client

Name: Trelleborg Industrial Products

Address.....: Kikkerlöntie 12, 38300 Sastamala, Finland

Test specification

Standard: Client specified test program in accordance with ECOLAB Standard
(method 40-1 / 06.2020 Rev. 6 / COP)

Test order from: 19.09.2022

Protocol update: 03.2021

Test result(s)

Demineralized water	- RESISTANT -
P3-topactive OKTO	- RESISTANT -
P3-topax 66	- RESISTANT -
P3-topactive 200	- RESISTANT -
P3-topactive 500	- RESISTANT -
P3-topax 990	- RESISTANT -

See also next pages

Results after visual inspection in accordance with ECOLAB standard
(A complete evaluation is made by the client.)

Test item

Description.....: Cable entry system

Trademark(s): --

Model and/or type reference.....: MH10 F 12-1

KRAIBURG THERMOLAST K TC6FRN-735, material no. 108445

Frame material 108342 POLYfill PPH GF5025HC2 ENH (see also
page 3)

Manufacturer.....: Trelleborg Industrial Products Finland OY
Kikkerlöntie 12, 38300 Sastamala; Finland

Test case verdicts

Test case does not apply to the test object : N(.A.)
 Test item does meet the requirement..... : P(ass)
 Test item does not meet the requirement..... : F(ail)
 Test item is resist against to the chemical..... : R(esistant)
 Test item is limited resist against to the chemical : L(imited) R(esistant)
 Test item is not resist against to the chemical..... : N(ot) R(esistant)

Testing

Date of receipt of test item : 28.09.2022-G/003 (G/003.01..G003.07)
 Date(s) of performance of test..... : 10/2022 - 11/2022

General remarks

The test results presented in this report relate only to the object tested.
 This report shall not be reproduced, except in full, without the written approval of the issuing testing laboratory.
 "(see Enclosure #)" refers to additional information appended to the report.
 "(see appended table)" refers to a table appended to the report.
 Throughout this report a comma is used as the decimal separator.
Yellow marks are abnormalities that may negatively affect the test results.
Blue marks are instructions for the client to follow for validation by the client and/or description of a deviation

Remark(s) to the test result(s):


The inspection results of the visual check are represented as photos starting with table 3 from page 6.
 A complete evaluation is made by the client.

General type information

7 complete test samples of gear boxes were made available by the client. One of these is a documentation sample (untested).

An overview on the used test samples are to be seen in table 1.

Table 1: test samples

SLG-sample no.	Type reference	Photo
6053-22-G/003	MH10 F 12-1 KRAIBURG THERMOLAST K TC6FRN-735, material no. 108445 Frame material 108342 POLYfill PPH GF5025HC2 ENH; Mat.No. 20093822	

General test remarks

One sample tested each test medium. Demineralized water is used as reference. The other test media are: **P3-topactive OKTO, P3-topax 66, P3-topactive 200, P3-topactive 500 and P3-topax 990.**

The chemical solution has been provided by ECOLAB.

The seventh sample was used as a reference sample for documentation purposes.

Test conditions:

The test media were used as follows:

Table 2: Test conditions

Test media	Test ordered	Concentration [%]	Change schedule	Immersion time [days]
Demineralized water (reference medium)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	-	7 days	28
P3-topactive OKTO (desinfectant; acid solution with peroxide)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3	3 days	
P3-topax 66 (cleaner/desinfectant; alkaline with chlorine)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3	3 days	
P3-topactive 200 (cleaner, alkaline with tenside)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5	7 days	
P3-topactive 500 (cleaner, acid solution with tenside)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5	7 days	
P3-topax 990 (neutral disinfectant; basis alkylaminacetat)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3	7 days	

The test solution is a mixture of reagent and demineralized water in appropriate concentration.

Test performance:

One sample per test medium was tested. The samples are completely immersed in 8000 ml of test medium. After 28 days and 7 days regeneration time (dry storage at room temperature) visual inspection is made.

Client specified test program in accordance with ECOLAB Standard (method 40-1 / 06.2020 Rev.6 / COP)			
Clause	Requirement + Test	Result - Remark	Verdict

CHEMICAL RESISTANCE OF MATERIALS			
1	TEST CONDITIONS	See page 4	P
	Test samples	6053-22-G/003.01..003.06	P
	Test.....	Client specified test program in accordance with ECOLAB Standard (method 40-1 / 06.2020 Rev. 6 / COP)	P
	Temperature requirement.....	(23±5)°C	P
	Test temperature	(23±5)°C	P
	Immersion time	28 days	P
	State of the sample during the test.....	assembled condition	P

2	TEST PERFORMANCE		
2.1	Check Before test		
2.1.1	Visual check	Samples with minor deviations. (starting with table 3 / page 6).	P
2.1.2	Test performance vs. test conditions		P
2.1.3	Compliance with the conditions	Was compliant	P
2.2	Check after test		
2.2.1	Visual check	Visual check was performed. The inspection results of the visual check are represented as photos starting with Table 4 / page 7.	P
2.2.2	Assessment of resistance to the above chemicals to the criterias R(esistant) , L(imited) R(esistant) and N(ot) R(esistant)		
	Demineralized water		R
	P3-topactive OKTO (1% conc.)		R
	P3-topax 66 (5% conc.)		R
	P3-topactive 200 (5% conc.)		R
	P3-topactive 500 (5% conc.)		R
	P3-topax 990 (3% conc.)		R
2.2.3	Complete evaluation	Is made by the client	N

End of test report

Photo documentation**Test samples before testing****Table 3: test samples before testing**

Sample no.	Type reference: MH10 F 12-1 KRAIBURG THERMOLAST K TC6FRN-735, material no. 108445 Frame material 108342 POLYfill PPH GF5025HC2 ENH	
G/003.01..003.06		Samples with minor deviations.

result of visual check after the test**Table 4: Demineralized water**

Test medium (test solution)	<i>Demineralized water</i>	Result - Remark
Sample no.	Type reference: MH10 F 12-1 KRAIBURG THERMOLAST K TC6FRN-735, material no. 108445 Frame material 108342 POLYfill PPH GF5025HC2 ENH	
G/003.06		<u>After 28 days:</u> No visible abnormalities - RESISTANT -

Table 5: P3-topactive OKTO


Test medium (test solution)	P3-topactive OKTO / 3%	Result - Remark
Sample no.	Type reference: MH10 F 12-1 KRAIBURG THERMOLAST K TC6FRN-735, material no. 108445 Frame material 108342 POLYfill PPH GF5025HC2 ENH	
G/003.01		After 28 days: No visible abnormalities - RESISTANT -

Table 6: P3-topax 66

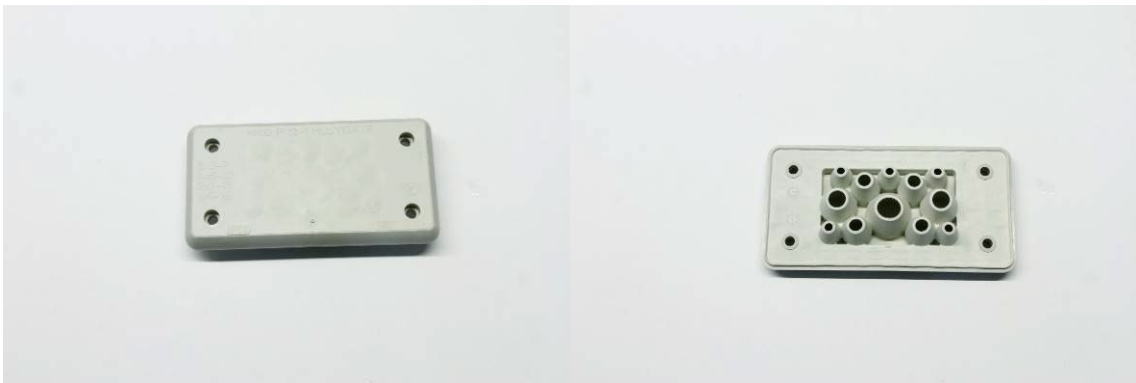
Test medium (test solution)	P3-topax 66 / 3%	Result - Remark
Sample no.	Type reference: MH10 F 12-1 KRAIBURG THERMOLAST K TC6FRN-735, material no. 108445 Frame material 108342 POLYfill PPH GF5025HC2 ENH	
G/003.02		<u>After 28 days:</u> No visible abnormalities - RESISTANT -

Table 7: P3-topactive 200


Test medium (test solution)	P3-topactive 200 / 5%	Result - Remark
Sample no.	Type reference: MH10 F 12-1 KRAIBURG THERMOLAST K TC6FRN-735, material no. 108445 Frame material 108342 POLYfill PPH GF5025HC2 ENH	
G/003.03		<u>After 28 days:</u> No visible abnormalities - RESISTANT -

Table 8: P3-topactive 500

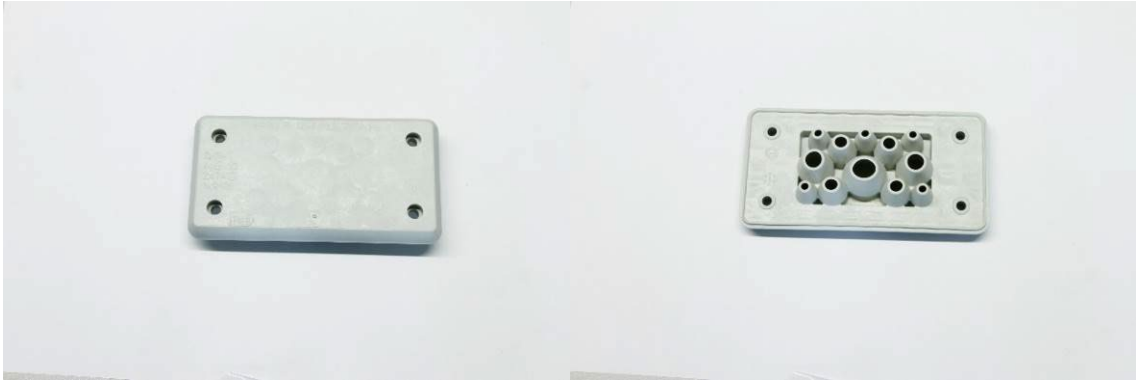
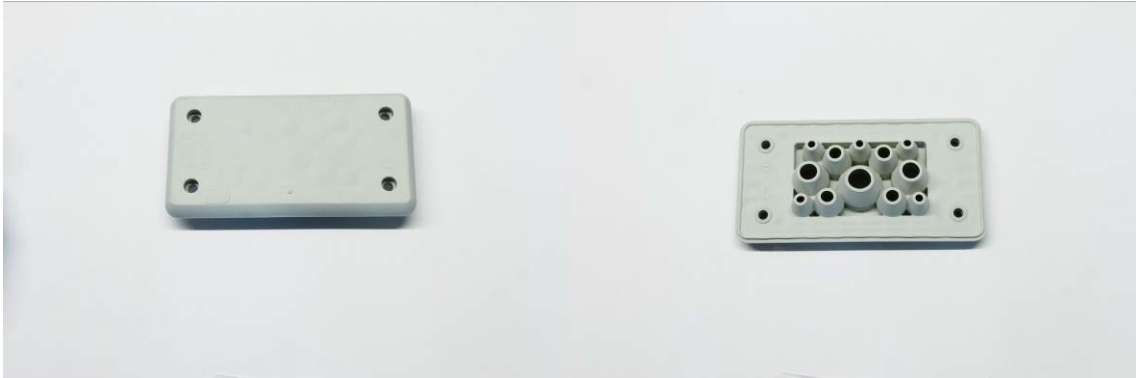
Test medium (test solution)	P3-topactive 500 / 5%	Result - Remark
Sample no.	Type reference: MH10 F 12-1 KRAIBURG THERMOLAST K TC6FRN-735, material no. 108445 Frame material 108342 POLYfill PPH GF5025HC2 ENH	
G/003.04		<u>After 28 days:</u> No visible abnormalities - RESISTANT -

Table 9: P3-topax 990

Test medium (test solution)	P3-topax 990 / 3%	Result - Remark
Sample no.	Type reference: MH10 F 12-1 KRAIBURG THERMOLAST K TC6FRN-735, material no. 108445 Frame material 108342 POLYfill PPH GF5025HC2 ENH	
G/003.05		<u>After 28 days:</u> No visible abnormalities - RESISTANT -