

## 1. Test Information

1. Test Name	CL1003 – CL1004 competitor product analysis and equivalent studies
2. Test Date	05.04.2023
3. Test Number	PN2315RD100146
4. Laboratory Manager	Dilay DURMAZ
5. Test Type	Foam test
6. Product name	PURINSEAL EN 404

## 2. Tests

- Competitor product analysis was made from the liquid sample of CL1003 and CL1004 product and EN 404 product study was carried out with similar properties.
- As a reWaterIt of the studies, a product that provides the same values as the competitor products has been obtained. Details are given below.

Test	EN 404 -A	EN 404 - B	EN 404 Mix	CL1003 - A	CL1003 - B	CL1003 Mix	CL1004-A	CL1004-B	CL1004 Mix
Appearance	Light Yellow	Amber	Amber	Light Yellow	Amber	Amber	Dark Yellow	Amber	Amber
Viscosity (mPa.sec)	530	215	360	400	200	330	277	297	287
NCO(%)	-	28	-	-	28	-	-	28,82	-
Density (g/cm <sup>3</sup> )	1,00	1,17	1,08	1,00	1,22	1,12	1,01	1,22	1,11
Mixing Ratio (g)	100	117	-	100	124	-	100	117	-
Reaction Start(sec)	-	-	5	-	-	5	-	-	5
Reaction End(sec)	-	-	70	-	-	190	-	-	50
Free Density (kg/m <sup>3</sup> )	-	-	27	-	-	45	-	-	-
ConWatermption (liter/kg)	-	-	26	-	-	40	-	-	-
Hardness (shore D)	-	-	70	-	-	70	-	-	70
PotDuration (sec)	-	-	240	-	-	180	-	-	10

- ❖ The product values given in the table were determined by testing at 23°C.
- ❖ Reaction start and end times were tested with 10% water based on 55 g product weight.
- ❖ Hardness and pot time tests were performed without using any water

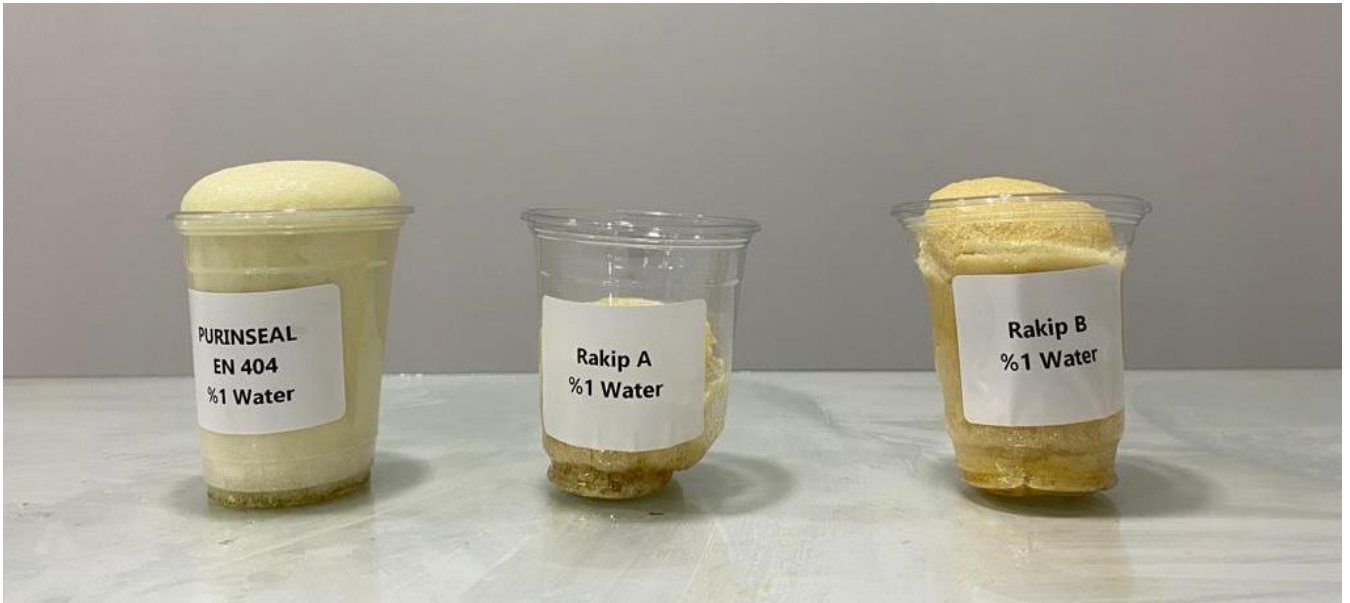
**3.Product reaction times according to water ratios**

1. Study using 1% water

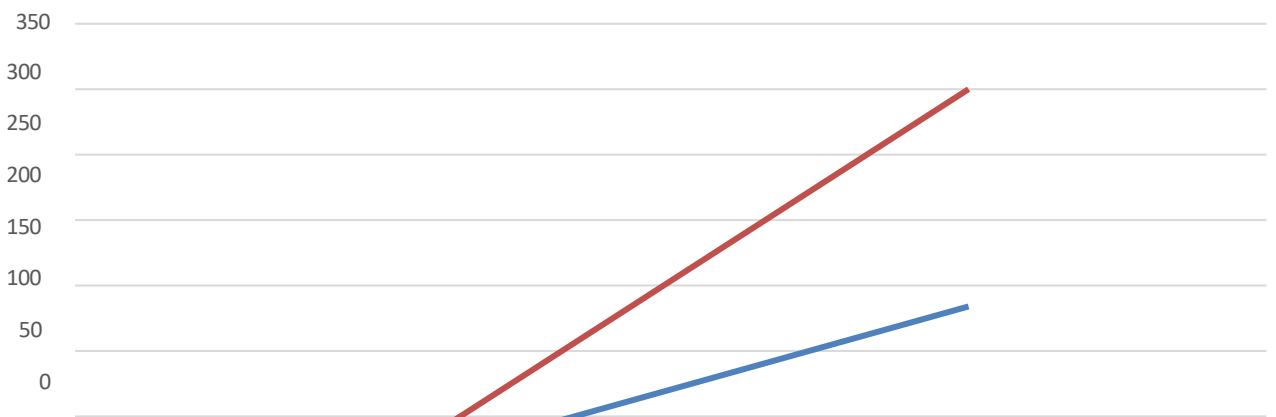
PURINSEAL EN 404 - %1 Water

CL1003 – %1 Water  
(COMPETITOR A)

CL1004- %1 Water  
(COMPETITOR B)



1% Reaction profile with



	Reaction start	Reaction finish
EN 404	7	134
CL1003	7	300
CL1004	2	27

2. Work using 10% water

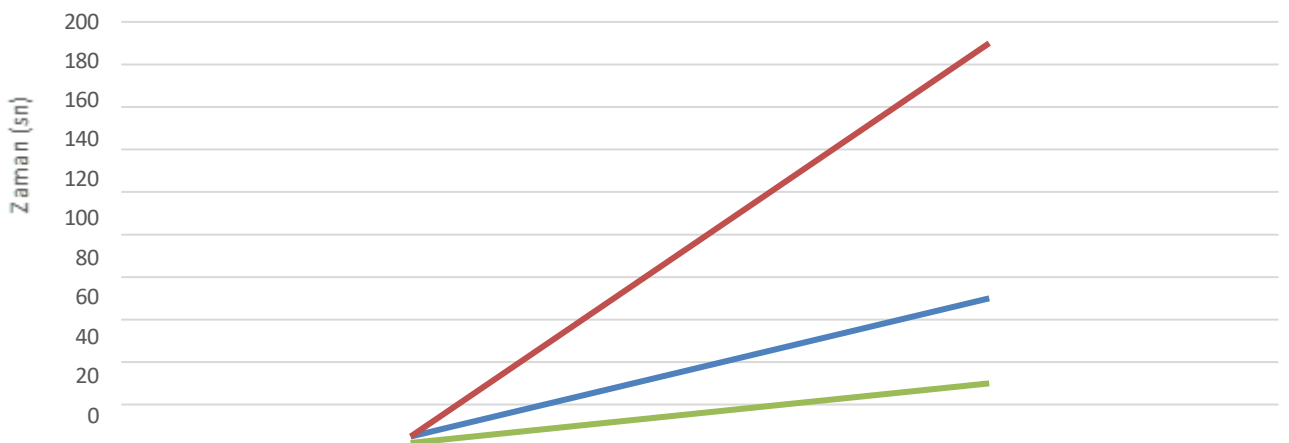
**PURINSEAL EN 404 - %10 WATER**

**CL1003 – %10 Water  
(COMPATITOR A)**

**CL1004 %10 Water  
(COMPATITOR B)**



10% Reaction profile with



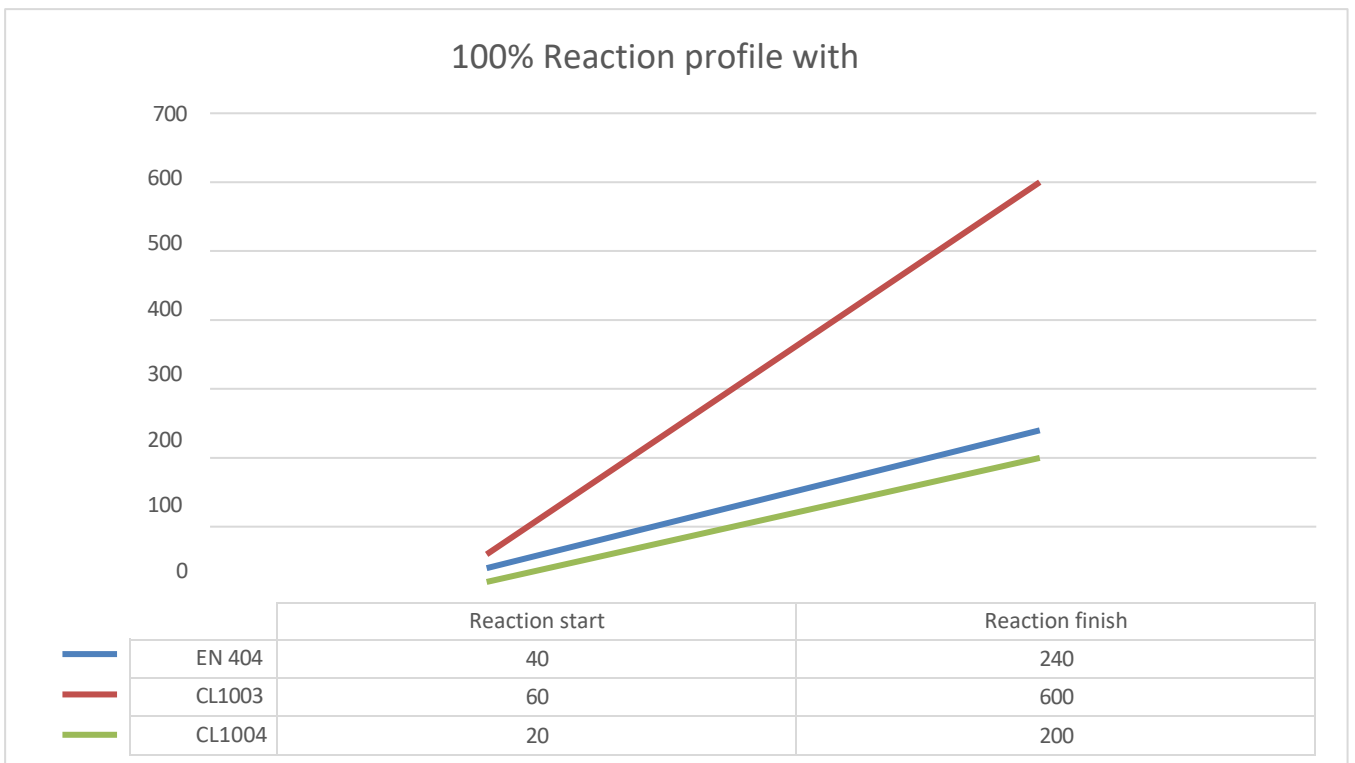
	Reaction start	Reaction finish
EN 404	5	70
CL1003	5	190
CL1004	2	30

3. Work using 100% Water

**PURINSEAL EN 404 - %100 WATER**

**CL1003 – %100 Water  
(COMPATITOR A)**

**CL1004-%100 Water  
(COMPATITOR B)**



4. Study using 300% Water

**PURINSEAL EN 404 - %300 Water**

**CL1003 – %300 Water  
(COMPATITOR A)**

**CL1004-%300 Water  
(COMPATITOR B)**



Ürün Görselleri

Product images of PURINSEAL EN 404 according to Water ratios



Product images of CL1003 according to Water ratios



Product images of CL1004 according to Water ratios



## 5.Evaluation and Conclusion

- As a result of the tests, it has been observed that the newly studied PURINSEAL EN 404 product can be offered as an equivalent to CL1003 - CL1004.
- PURINSEAL EN 404 is more successful in terms of foam structure and stability than COMPATITOR products.