

Overview

This document describes the chemical resistance tests performed on VeroWhitePlus and TangoPlus.

Test Method

The tests were performed according to—

- D543-06 for VeroWhitePlus
- D471-12a for TangoPlus

All tests were conducted at room temperature.

Specimens

The specimens were completely immersed in the following liquids:

- Ethanol
- Soy oil
- Diesel
- Gasoline

All specimens were printed in Glossy mode and in one pass.

Scale

Unless otherwise specified:

- A—no change from reference specimen
- B—minor change from reference specimen
- C—moderate change from reference specimen
- D—extreme change from reference specimen
- No change— the tested property (tensile strength or elongation) showed no observed difference between the test and the reference specimen.
- Lower— the tested property (tensile strength or elongation) was lower in the test specimen than in the reference specimen.
- Higher—elongation was lower in the test specimen than in the reference specimen (due to increased softness).
- N/A—the sample could not be measured due to degradation.

Test Results

VeroWhitePlus—change after 24-hour exposure

Liquid	Change					
	Yellowing	Cracking	Deformation	Elasticity	Glossiness	Mass (%) ¹
Ethanol	A	A	A	B	A	+2
Gasoline	B	A	A	A	A	0
Diesel	A	A	A	A	A	0
Soya oil	A	A	A	A	A	0

VeroWhitePlus—change after 72-hour exposure

Liquid	Change					
	Yellowing	Cracking	Deformation	Elasticity	Glossiness	Mass (%) ¹
Ethanol	A	A	A	B	A	+4
Gasoline	C	A	A	A	A	0
Diesel	A	A	A	A	A	0
Soya oil	A	A	A	A	A	0

TangoPlus—change after 24-hour exposure

Liquid	Change					
	Yellowing	Cracking	Deformation	Elasticity	Glossiness	Mass (%) ¹
Ethanol	A	C	B	D	A	+4
Gasoline	C	B	B	C	A	+6
Diesel	B	A	A	B	A	0
Soya oil	A	A	A	A	A	0

TangoPlus—change after 72-hour exposure

Liquid	Change					
	Yellowing	Cracking	Deformation	Elasticity	Glossiness	Mass (%) ¹
Ethanol	A	D	D	D	A	+8
Gasoline	C	B	C	C	A	+14
Diesel	B	A	A	B	A	+5
Soya oil	A	A	A	A	A	0



VeroWhitePlus— changes in mechanical properties after 24-hour exposure

Liquid	Tensile Strength	Elongation
Ethanol	Lower (62%—66%)	Higher (120%—350%)
Gasoline	No change	No change
Diesel	No change	No change
Soya oil	No change	No change

VeroWhitePlus— changes in mechanical properties after 72-hour exposure

Liquid	Tensile Strength	Elongation
Ethanol	Lower (37%—41%)	Higher (130%—270%)
Gasoline	No change	No change
Diesel	No change	No change
Soya oil	No change	No change

TangoPlus— changes in mechanical properties after 24-hour exposure

Liquid	Tensile Strength	Elongation
Ethanol	N/A	N/A
Gasoline	N/A	N/A
Diesel	Lower (65%—87%)	Lower (75%—94%)
Soya oil	No change	No change

TangoPlus— changes in mechanical properties after 72-hour exposure

Liquid	Tensile Strength	Elongation
Ethanol	N/A	N/A
Gasoline	N/A	N/A
Diesel	Lower (65%—85%)	Lower (75%—94%)
Soya oil	No change	No change

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