



# ECOCORTEC

**PROJECT: S-4/2018**

**- VCI-Orange zip-lock bag (120 mm x 166 mm)**

**TEST REPORT**

Date: October 29<sup>th</sup>, 2018

Prepared by: Mirjana Kramar



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## LABORATORIES

**Background:** VIA testing and testing mechanical properties of sample VCI bag, produced in company POLISAVE.

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**From:** Eco Cortec Laboratories  
Beli Manastir

**Project #:** S-4/2018

**Results reported by:** *Mirjana Kramar*

**Approved by:** *Snježana Mikolić*

**Date:** *October 29<sup>th</sup>, 2018*



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### CORROSION TESTING

**Method:** VIA Test

**Materials:**

- 1) Carbon steel plugs
- 2) VIA test jars
- 3) VIA test solution
- 4) Oven set to 40°C±2°C

**Procedure:**

Testing was performed according to VIA test method. German VIA Test (TL-8135-002) and Federal Standard (101C, Method 4031, Procedure B)

**SAMPLE NAME:** VCI ORANGE BAG – 80 µm (size:160 x 120 mm)

**VIA - TEST**

CONTROL	Grade 0 – No corrosion inhibiting effect
SAMPLE#1	Grade 2 – Medium corrosion inhibiting effect
SAMPLE#2	Grade 2 – Medium corrosion inhibiting effect
SAMPLE#3	Grade 1 – Minute corrosion inhibiting effect
PASS/FAIL	PASS

*Note: Grade 0-Fail, Grade 1-Fail, Grade 2-Pass, Grade 3-Pass*

**Interpretations:**

Based on test results of VCI Film, manufactured in POLISAVE, two carbon steel plugs have medium corrosion inhibiting effect, one plug has grade one. The film did not pass VIA test. The film produced in Polisave company, according to VIA test results, does not provide sufficient corrosion protection.



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**Photo from VIA testing:**



**Contorol plug**

**Plug #1**

**Plug #2**

**Plug #3**



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### Mechanical Properties – Film 80 µm

#### Cross direction properties:

<u>Property</u>	-	<u>Test Method</u>	<u>Units</u>	<b>Ecocortec film 80 µm</b>	<b>Polisave film 80 µm</b>
Caliper		ASTM D6988	µm	82	84
Breaking Factor	MD	ASTM D882-02	N		
	CD			45,98	38,16
Tensile Strength at Break	MD	ASTM D882-02	MPa		
	CD			22,67	17,93
Elongation at Break	MD	ASTM D882-02	%		
	CD			775,1	609

**Interpretations: Film produced at Ecocortec shows better mechanical properties in cross direction of extrusion than Polisave film.**