

DEKRA Automobil GmbH Handwerkstr. 15 D-70565 Stuttgart

Tire Protection Systems BV  
Mr. Marco Kranenbroek  
Prins Bernardstraat 23  
7241 DH Lochem  
NIEDERLANDE

**DEKRA Automobil GmbH**  
Labor für Umwelt- und Produktanalytik  
Handwerkstr. 15  
70565 Stuttgart  
Tel. +49.711.7861-3548  
Fax +49.711.7861-3534

Contact Thilo Kunst  
Tel. direct +49.711.7861-3550  
E-Mail thilo.kunst@dekra.com  
Date 29.08.2016  
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**Test Report: 55254133/16-1**

**Project Number: 55254133**

Client: Tire Protection Systems BV  
Mr. Marco Kranenbroek  
Prins Bernardstraat 23  
7241 DH Lochem  
via  
DEKRA Certification B.V.  
Elvira Geel  
Meander 1051  
6825 MJ ARNHEM  
NIEDERLANDE


Date of order: 03.08.2016  
Sampled by: not known  
Sample received: 12.08.2016  
Number of samples 1  
Scope of investigation: Testing of screen cleaner winter according to DEKRA criteria  
Project / reference: Ride on Tire protection system  
Testing period: 12.08.2016 – 29.08.2016

**Test result: - following pages -**

**DAkKS-accredited Analyses Laboratory D-PL-11060-03-00 in Stuttgart and Halle.**

### 1 Sample designation

No. of sample	Designation
55254133-1	Ride on Tire protection system

No. of sample	Sample picture
55254133-1	

\* Test method not accredited

## 2 Rubber compatibility according to DEKRA test specification (QMA 2001.1425)

### Test method:

Wiper materials, rubber seals and wheel rubber for automotive applications are tempered at room temperature and covered with the test sample for 24 hours. Afterwards a visual examination of surface changes is carried out.

### Test result:

No. of sample	Evaluation	Test method
55254133-1	no changes	QMA 2001.1425

## 3 Lacquer compatibility according to DEKRA test specification (QMA 2001.1400)

### Test method:

Lacquered plates with 2-K-lacquering (moonland grey metallic (OPEL) and black metallic (MB 189)) and Uni lacquering (dark blue (VW Y5L) and imola red II (BMW)) are covered with the test samples and tempered at room temperature and also at 50°C for 24 hours. Afterwards a visual examination of surface changes is carried out.

### Test results:

#### 3.1 grey, metallic (OPEL moonland grey)

##### 3.1.1 at room temperature

No. of sample	Evaluation	Test method
55254133-1	no changes	QMA 2001.1400

##### 3.1.2 at 50 °C

No. of sample	Evaluation	Test method
55254133-1	swelling	QMA 2001.1400

#### 3.2 black, metallic (MB 189)

##### 3.2.1 at room temperature

No. of sample	Evaluation	Test method
55254133-1	no changes	QMA 2001.1400

\* Test method not accredited

## 3.2.2 at 50 °C

No. of sample	Evaluation	Test method
55254133-1	swelling	QMA 2001.1400

## 3.3 dark blue, uni (VW Y5L)

## 3.3.1 at room temperature

No. of sample	Evaluation	Test method
55254133-1	no changes	QMA 2001.1400

## 3.3.2 at 50 °C

No. of sample	Evaluation	Test method
55254133-1	swelling	QMA 2001.1400

## 3.4 red, uni (BMW imolared II)

## 3.4.1 at room temperature

No. of sample	Evaluation	Test method
55254133-1	no changes	QMA 2001.1400

## 3.4.2 at 50 °C

No. of sample	Evaluation	Test method
55254133-1	swelling	QMA 2001.1400

\* Test method not accredited

#### 4 Metal compatibility according to DEKRA test specification (QMA 2001.1443)

##### Test method:

Metals for automotive applications that are tempered at room temperature and also at 50°C are covered with the test sample for 24 hours. Afterwards a visual examination of surface changes is carried out.

##### 4.1 Aluminium compatibility (anodized)

##### Test result:

No. of sample	Evaluation		Test method
	Room temperature	50 °C	
55254133-1	no changes	no changes	QMA 2001.1443

##### 4.2 Aluminium compatibility (raw)

##### Test result:

No. of sample	Evaluation		Test method
	Room temperature	50 °C	
55254133-1	no changes	slight discoloration	QMA 2001.1443

##### 4.3 Material compatibility with copper

##### Test result:

No. of sample	Evaluation		Test method
	Room temperature	50 °C	
55254133-1	slight discoloration <sup>1</sup>	slight discoloration <sup>1</sup>	QMA 2001.1443

<sup>1</sup> not negatively evaluated yet

\* Test method not accredited

#### 4.4 Material compatibility with brass

Test result:

No. of sample	Evaluation		Test method
	Room temperature	50 °C	
55254133-1	slight discoloration <sup>1</sup>	slight discoloration <sup>1</sup>	QMA 2001.1443

<sup>1</sup> not negatively evaluated yet

#### 4.5 Material compatibility with steel

Test result:

No. of sample	Evaluation		Test method
	Room temperature	50 °C	
55254133-1	slight discoloration <sup>1</sup>	slight discoloration <sup>1</sup>	QMA 2001.1443

<sup>1</sup> not negatively evaluated yet

#### 4.6 Material compatibility with stainless steel

Test result:

No. of sample	Evaluation		Test method
	Room temperature	50 °C	
55254133-1	no changes	no changes	QMA 2001.1443

#### 4.7 Material compatibility with chromed steel

Test result:

No. of sample	Evaluation		Test method
	Room temperature	50 °C	
55254133-1	no changes	no changes	QMA 2001.1443

\* Test method not accredited

## 5 Plastics compatibility according to DEKRA test specification (QMA 2001.1478)

### Test method:

Various plastics and copolymeres are tempered at room temperature and also at 50°C and covered with the tested sample for 24 hours. Afterwards a visual examination of surface changes is carried out.

### Test results:

#### 5.1 Polyethylene (PE-HD)

No. of sample	Evaluation		Test method
	Room temperature	50 °C	
55254133-1	no changes	no changes	QMA 2001.1478

#### 5.2 Polypropylene (PP)

No. of sample	Evaluation		Test method
	Room temperature	50 °C	
55254133-1	no changes	no changes	QMA 2001.1478

#### 5.3 Polystyrene (PS)

No. of sample	Evaluation		Test method
	Room temperature	50 °C	
55254133-1	no changes	slight discoloration	QMA 2001.1478

#### 5.4 Polymethyl methacrylate (PMMA)

No. of sample	Evaluation		Test method
	Room temperature	50 °C	
55254133-1	no changes	slight discoloration	QMA 2001.1478

#### 5.5 Acrylonitril-Butadiene-Styrene (ABS)

No. of sample	Evaluation		Test method
	Room temperature	50 °C	
55254133-1	no changes	slight discoloration	QMA 2001.1478

\* Test method not accredited



**5.6 Polyoxymethylene (POM)**

No. of sample	Evaluation		Test method
	Room temperature	50 °C	
55254133-1	no changes	no changes	QMA 2001.1478

**5.7 Polyvinyl chloride (PVC)**

No. of sample	Evaluation		Test method
	Room temperature	50 °C	
55254133-1	no changes	no changes	QMA 2001.1478

**5.8 Polyamide (PA)**

No. of sample	Evaluation		Test method
	Room temperature	50 °C	
55254133-1	slight swelling <sup>2</sup>	slight swelling <sup>2</sup>	QMA 2001.1478

<sup>2</sup> not negatively evaluated yet

**Hints:**

The test results refer exclusively to the samples specified. A reproduction in excerpts of the test report must not be made without the written consent of the test laboratory. Chemical and material blanks are taken into account when determining the results. Samples will be stored for max. 6 months (for exceptions and specific storage times see QMH).

Stuttgart, 2016-08-29

**DEKRA Automobil GmbH**

Laboratory for Environmental and Product Analysis



Thilo Kunst

Project manager car chemistry and technical cleanliness

\* Test method not accredited