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Date 06.03.2017

Test Report: 55255786-3

Version 1

Client:	Autoland J. Kisielewski & J. Moranski Sp.j. ul. Mickiewicza 28 43250 PAWLOWICE POLEN via DEKRA Certification Sp. z.o.o. Miroslaw Hanc Plac Solny 20 50-063 Warszawa
Date of order:	14.02.2017
Sampled by:	not known
Sample received:	14.02.2017
Number of samples	1
Scope of investigation:	Testing of screen cleaner winter according to DEKRA criteria
Project / reference:	Zimowy Płyn do Spryskiwaczy -22
Testing period:	14.02.2017 – 06.03.2017

Test result:

- following pages -

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

1 Sample designation

No. of sample	Designation
55255786-3	Zimowy Płyn do Spryskiwaczy -22 (identical to sample 55253726-1 formulacja 1, -20℃ , slightly different freezing point)

No. of sample	Sample picture
55255786-3	

Test method not accredited

2 Flash point measurement

No. of sample	Result [℃]	Test method
55255786-3	30.5	DIN EN ISO 13736

Annotation:
Measuring tolerance of the determination: ±1 ℃.
The uncertainty of measurement given in the standard is fulfilled.

3 Freezing point measurements (QMA 2001.1409)

No. of sample	Result [℃]	Test method
55255786-3	-24	ASTM D 1177

Annotation:
Measuring tolerance about ±1 ℃.

4 Measurement of the pH value (20 ℃)

No. of sample	Result	Test method
55255786-3	7.6	DIN EN ISO 10523

5 Measurement of density*

No. of sample	Result [g/cm^3]	Test method
55255786-3	0.9642	DIN 51757

6 Measurement of refraction index*

No. of sample	Result	Test method
55255786-3	1.3576	DIN 51423-2

* Test method not accredited

7 Notifiable scents (QMA 1426)

according to Council Directive No. 76/768/EEC (1976-07-27, last amended on 2008-04-03) and according to Regulation (EC) No. 648/2004 (2004-03-31, last amended on 2006-06-20).

The sample was diluted with two different solvents. An aliquot of the dilution was analysed once by means of GC-MSD (gas-chromatography coupled with mass-selective detection) in SCAN-mode to determine the TVOC-value (in the retention time area extending from hexane to hexadecane as toluene equivalents) and once in SIM-mode (selected-ion-monitoring) to determine the concentrations of the individual substances (26 sensitising scents). The identification of the substances was achieved by comparison of retentions times with those of standards and depending on the substance with 2-4 characteristic mass-traces (1 target-ion and 1-3 qualifier ions) while the quantification was effected by reference to the internal matrix standard.
It was found possible to identify the following substances by comparison with spectra databanks and pure substances with a limit of quantification of 0.001 % w/w in a boiling range of 50 to 400 °C:

* Test method not accredited

7.1 Results

Substance	CAS No.	Unit	Result	Limit[4]	Test method
Amyl cinnamal	122-40-7	% w/w	< 0.001	0,01	GC/MS
Benzyl alcohol	100-51-6		< 0.001		
Cinnamyl alcohol	104-54-1		< 0.001		
Citral	5392-40-5		< 0.001		
Eugenol	97-53-0		< 0.001		
Hydroxy-citronellal	107-75-5		< 0.001		
Isoeugenol	97-54-1		< 0.001		
Amylcinnamyl alcohol	101-85-9		< 0.001		
Benzyl salicylate	118-58-1		< 0.001		
Cinnamal	104-55-2		< 0.001		
Coumarin	91-64-5		< 0.001		
Geraniol	106-24-1		< 0.001		
Hydroxy-methylpentyl-cyclohexe-necarboxaldehyde	31906-04-4		< 0.001		
Anisyl alcohol	105-13-5		< 0.001		
Benzyl cinnamate	103-41-3		< 0.001		
Farnesol	4602-84-0		< 0.001		
2-(4-tert-Butylbenzyl)propion-al-dehyde	80-54-6		< 0.001		
Linalool	78-70-6		< 0.001		
Benzyl benzoate	120-51-4		< 0.001		
Citronellol	**106-22-9**		**0.004**		
Hexyl cinnam-aldehyde	101-86-0		< 0.001		
d-Limonene	5989-27-5		< 0.001		
Methyl heptin carbonate	111-12-6		< 0.001		
3-Methyl-4-(2,6,6-trimethyl-2-cy-clohexene-1-yl)-3-buten-2-one	127-51-5		< 0.001		
Treemoss extract	90028-67-4		< 0.001		

4 if the content is ≥ 0.01 % w/w the scent must be indicated on the contents list of cleaning products

7.2 Evaluation

There were no substances detected with a content of ≥ 0.01 % w/w.

* Test method not accredited

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, 2017-03-06

DEKRA Automobil GmbH

Laboratory for Environmental and Product Analysis

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Project manager car chemistry and technical cleanliness

* Test method not accredited