

Warwick GmbH & Co Music Equipment KG
Mr. Hans Peter Wilfer
Gewerbegebiet 46
08258 Markneukirchen

DEKRA Automobil GmbH

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Date 15.08.2018
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Test Report No.: 55053632-06

Client: Warwick GmbH & Co Music Equipment KG
Mr. Hans Peter Wilfer
Gewerbegebiet 46
08258 Markneukirchen

Supplier: GHS STRINGS
2813 Wilber Ave.
Battle Creek Mi. 49037
USA

Date of order: Jul 27, 2018

Sampling: Sample was sent by client

Sample received: Jul 27, 2018

Number of samples: 11

Scope of investigation: Testing of guitar strings

Result: The result of nickel release of sample GHS 7200 M (27072018052) exceeds the limit of Regulation (EC) No. 1907/2006 (Annex 17, entry 27). For all other samples analysed the limit is met.

Testing period: 27.07.2018 - 10.08.2018

Test result:

- see following pages -

Akkreditiertes Analyselabor D-PL-11060-03-00 in Stuttgart und Halle.
CPSC Identification Number for DEKRA Laboratory Services: 1236

Parameter list :

Parameter	Test method	Limit of quantification	Legal limit acc. to REACH
Nickel release	DIN EN 1811:2015-10 / BVL B 82.02-6:2016-7	0.1 µg/cm ² /week	0.5 µg/cm ² /week

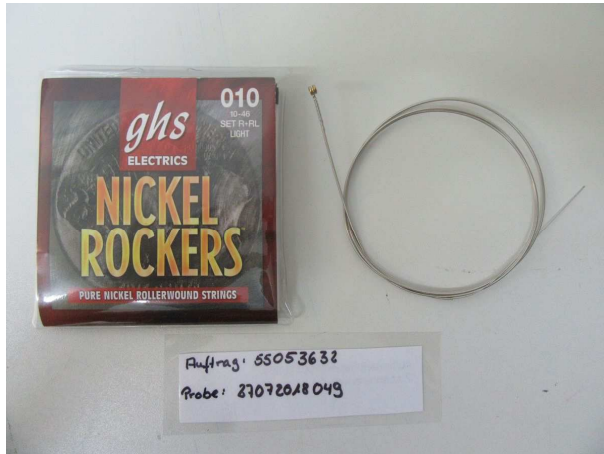
Test results:

sample no.	sample designation	Nickel release µg/cm²/Woche
27072018043	GHS GB L / Boomers Light 010" / 046"	< 0.1
27072018044	GHS 3045 L / Boomers Light 040" / 095"	0.31
27072018045	GHS ST L / Super Steels Light 010" / 046"	< 0.1
27072018046	GHS SS 5000 L / Super Steels Light 040" / 102"	< 0.1
27072018047	GHS PR L / Progressive Light 010" / 046"	< 0.1
27072018048	GHS PG 8000 L / Progressive Light 040" / 100"	< 0.1
27072018049	GHS R+R L / Nickel Rockers Light 010" / 046"	< 0.1
27072018050	GHS BNR L / Burnished Nickel Light 010" / 046"	< 0.1
27072018051	GHS BF 710 / Bright Flats Light 010" / 046"	< 0.1
27072018052	GHS 7200 M / Pressurew. All52 Medium 044" / 106"	2.4
27072018053	GHS PFT 900 L / Precision Flatwnd Light 012" / 050"	< 0.1

According to your information the strings of one set are produced of identical material. Therefore one string of each set was analysed representing the complete set.

Pictures of the samples:



**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 according to QMV 5.8 for max. 6 months (for exceptions and specific storage times see QMV 5.8).

Halle, August 15th 2018

DEKRA Automobil GmbH
Laboratory for Environmental and Product Analysis


Dr. Nadine Paul
Lab manager