



Date, June 26<sup>th</sup>, 2017  
 TR n° **349-(eng)/2016**  
 Ref. Your Confirm dated 19.05.16

To  
 TUBI GOMMA TORINO S.p.A.  
 Strada Statale 31 – km 39,4, n. 42  
 15040 MIRABELLO MONFERRATO (AL)

Received 19.05.2016 Start tests 20.05.2016 End tests 14.06.2016 Page 1 of 2

## SUPPLEMENT TO TEST REPORT

**Subject:** SUITABILITY TO BE USED IN CONTACT WITH FOODS, ACCORDING TO **BfR – XXI RECCOMANDATION – CATEGORY 2**, ON A SAMPLE OF RUBBER COMPOUND MARKED "**EPDM 60 BA FDA BFR**" SUPPLIED AS VULCANIZED RUBBER SHEETS 2 mm thick

		<u>On the rubber compound</u> <u>"EPDM 60 BA FDA BFR"</u>	<u>Requirements</u>
• Content of zinc	%	0,8	≤ 3
• Content of lead	%	< 0,001	≤ 0,003
• Content of aliphatic and cycloaliphatic amines	mg/dm <sup>2</sup>	Not detectable (<0,02)	≤ 5
• p-phenylenediamine	mg/l	Not detectable (<0,01)	≤ 0,3
• Zinc dibenzyl dithiocarbamate	mg/kg elastomer	Not detectable (<0,1)	≤ 0,1

**Compound:** EPDM 60 BA FDA BFR      Migrations after contact of the rubber sheets with the Simulators for 24 hours at 40°C (Category 2)

**Simulator: Distilled water**

• Total migration	mg/dm <sup>2</sup>	6,0	≤ 20
• Primary arylamines	µg/l	Not detectable	≤ 20
• Secondary N-alkyl arylamines	mg/l	Not detectable	≤ 1
• Formaldehyde	µg/ml	Not detectable	≤ 3
• N-nitrosamines	µg/dm <sup>2</sup>	< 0,01	≤ 1

**Simulator: Acetic acid 3% (m/v) in water**

• Total migration	mg/dm <sup>2</sup>	39,6	≤ 100
• Primary arylamines	µg/l	2,0	≤ 20
• Secondary N-alkyl arylamines	mg/l	Not detectable	≤ 1
• N-nitrosamines	µg/dm <sup>2</sup>	< 0,01	≤ 1

Date, June 26<sup>th</sup>, 2017

TR n° 349-(eng)/2016

Page 2 of 2



---

**S U P P L E M E N T T O T E S T R E P O R T**

---

Requirements**Compound: EPDM 60 BA FDA BFR****Migrations after contact of the rubber sheets with the Simulators for 24 hours at 40°C (Category 2)****Simulator: Ethanol 10% (v/v) in water**

• Total migration	mg/dm <sup>2</sup>	7,3	≤ 20
• Primary arylamines	µg/l	3,0	≤ 20
• Secondary N-alkyl arylamines	mg/l	Not detectable	≤ 1
• N-nitrosamines	µg/dm <sup>2</sup>	< 0,01	≤ 1

**NOTE:** The food simulators at the end of the contact are colourless, odourless and tasteless.**REMARK:** On the basis of the test results and on the basis of the recipe provided by the Customer, **we certifies** that the examined nitrilic rubber compound marked "**EPDM 60 BA FDA BFR**" **is in compliance** with the requirements of the **Recommendation XXI Category 2 of BfR** for the use in contact with foods, including milkThe sampling has been carried out by the Customer.  
----The contained results refer only to the tested sample.  
----

This report cannot be partially reproduced without the laboratory approval.

E. Badomer, **Operator**F. Negroni, **Director**