



Date, April 09th, 2018
 TR n° 529-(eng)/2017
 Ref. Your Confirm dated 12.09.2017

To

TUBI GOMMA TORINO S.p.A.

Strada Statale 31 – km 39,4, n. 42

15040 MIRABELLO MONFERRATO (AL)

Received 14.09.2017

Start tests 18.09.2017

End tests 21.11.2017

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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 "**BUTILE BIIR ST BIANCO**" SUPPLIED AS VULCANIZED RUBBER SHEETS 2 mm thick

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

Compound:
BUTILE BIIR ST BIANCO

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

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

• Total migration	mg/dm ²	45,1	≤ 100
• Primary arylamines	µg/l	Not detectable	≤ 20
• Secondary N-alkyl arylamines	mg/l	0,9	≤ 1
• N-nitrosamines	µg/dm ²	< 0,01	≤ 1

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SUPPLEMENT TO TEST REPORT

Requirements**Compound:****BUTILE BIIR ST BIANCO****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 ²	3,3	≤ 20
• Primary arylamines	µg/l	Not detectable	≤ 20
• Secondary N-alkyl arylamines	mg/l	0,1	≤ 1
• N-nitrosamines	µg/dm ²	< 0,01	≤ 1

NOTE: The food simulators at the end of the contact are colourless, odourless and tasteless.

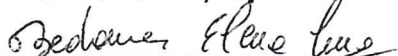
REMARK: On the basis of the test results and on the basis of the recipe provided by the Customer, **we certifies** that the examined rubber compound marked "**BUTILE BIIR ST BIANCO**" **is in compliance** with the requirements of the **Recommendation XXI Category 2 of BfR** for the use in contact with all foods, including milk.

The 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**

