

Test Report

Revised Report

Report No.: 100103764B Project No.: 10303580.1 Date: May 5, 2014 Trace Code: A14.0362

Client:

POLIBLEND SPA

Via Piccinelli 12

Mozzate, Co 22076

Italy

Attention:

Stefano Bertolini

Authorization: Quote Number 1100060494

Samples Received: (04/16/2014)

➤ Polimid A SG Naturale FD

➤ Polimid B AV Naturale FD

➤ Polimid A 30 GF Naturale FD

➤ Polimid B 30 GF Naturale FD

Analysis Requested: Extraction Studies done in accordance with FDA 21 CFR §177.1500

Analysis Performed On: April 22, 2014 through April 30, 2014

Results and Discussion:

Extraction studies were performed on the submitted samples in accordance with FDA 21 CFR §177.1500, Nylon Resins. Approximately 30 grams of material was extracted at reflux temperature for eight hours using purified water, 95% ethyl alcohol, ethyl acetate and benzene. The extract was filtered while hot and evaporated to dryness. The amount of residue in percent by weight was then determined. The samples were analyzed in duplicate. The results of these analyses are found on the attached tables.

The submitted samples, Polimid A SG Naturale FD, Polimid B AV Naturale FD, Polimid A 30 GF Naturale FD, and Polimid B 30 GF Naturale FD, meet the specification found in FDA 21 CFR §177.1500 for purified water, 95% ethyl alcohol, ethyl acetate, and benzene.

Report revised due to client request for use of commercial name.

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Please contact us if you have any questions regarding these results or if you require additional information.

Joanne M. Deskus VS Senior Chemist Analytical Chemistry

Judith V. Haber

Senior Laboratory Operations Manager

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Analytical Chemistry

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| RESULTS FOR POLIMID A SG NATURALE FD IN ACCORDANCE WITH FDA 21 CFR §177.1500 | | | | |
|--|-------------|--------------|--|--|
| Sample ID | Results (%) | Criteria (%) | | |
| Water A | 0.47 | 1.5 | | |
| Water B | 0.47 | 1.5 | | |
| 95% Ethyl Alcohol A | 0.26 | 1.5 | | |
| 95% Ethyl Alcohol B | 0.29 | 1.5 | | |
| Ethyl Acetate A | 0.00 | 0.2 | | |
| Ethyl Acetate B | 0.00 | 0.2 | | |
| Benzene A | 0.00 | 0.2 | | |
| Benzene B | 0.00 | 0.2 | | |

| RESULTS FOR POLIMID B AV NATURALE FD IN ACCORDANCE WITH FDA 21 CFR §177.1500 | | | | |
|--|-------------|--------------|--|--|
| Sample ID | Results (%) | Criteria (%) | | |
| Water A | 0.42 | 1.0 | | |
| Water B | 0.42 | 1.0 | | |
| 95% Ethyl Alcohol A | 0.16 | 2.0 | | |
| 95% Ethyl Alcohol B | 0.15 | 2.0 | | |
| Ethyl Acetate A | 0.00 | 1.0 | | |
| Ethyl Acetate B | 0.00 | 1.0 | | |
| Benzene A | 0.00 | 1.0 | | |
| Benzene B | 0.00 | 1.0 | | |

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| POLIBLEND SPA | | | | |
|----------------------------|-----------------------------|---------------------------|--|--|
| RESULTS FOR POLIMID A 30 G | F NATURALE FD IN ACCORDANCE | WITH FDA 21 CFR §177.1500 | | |
| Sample ID | Results (%) | Criteria (%) | | |
| Water A | 0.38 | 1.5 | | |
| Water B | 0.41 | 1.5 | | |
| 95% Ethyl Alcohol A | 0.20 | 1.5 | | |
| 95% Ethyl Alcohol B | 0.21 | 1.5 | | |
| Ethyl Acetate A | 0.00 | 0.2 | | |
| Ethyl Acetate B | 0.00 | 0.2 | | |
| Benzene A | 0.02 | 0.2 | | |
| Benzene B | 0.01 | 0.2 | | |

| RESULTS FOR POLIMID B 30 GF NATURALE FD IN ACCORDANCE WITH FDA 21 CFR §177.1500 | | | | |
|---|-------------|--------------|--|--|
| Sample ID | Results (%) | Criteria (%) | | |
| Water A | 0.33 | 1.0 | | |
| Water B | 0.34 | 1.0 | | |
| 95% Ethyl Alcohol A | 0.21 | 2.0 | | |
| 95% Ethyl Alcohol B | 0.21 | 2.0 | | |
| Ethyl Acetate A | 0.00 | 1.0 | | |
| Ethyl Acetate B | 0.00 | 1.0 | | |
| Benzene A | 0.00 | 1.0 | | |
| Benzene B | 0.00 | 1.0 | | |

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TEST REPORT

N°17-FC01994

Identification number: 17-FC01994

Sample description: Polimid A 15 GF FD

Sampled by: Customer (§)

Customer: POLIBLEND S.P.A.

VIA PICCINELLI, 12 MOZZATE 22076 CO

Arrival date: 28/07/2017

(§) The Laboratory is not responsible for sampling modalities.

RESULTS

| Determination | Result | unc | u.m. | LOQ | LOD | Limits | Method | Start | End |
|---|--------|-----|------|-----|-----|--------|---------------------------|-------|-------|
| Extractable fraction in water (8 h at reflux) | 0.2 | | % | 0.1 | | 1.5 | FDA - Title 21 – 177.1500 | 28/07 | 03/08 |
| Extractable fraction in benzene (8 h at reflux) | < 0.1 | | % | 0.1 | | 0.2 | FDA - Title 21 – 177.1500 | 28/07 | 03/08 |
| Extractable fraction in Ethyl acetate (8 h at reflux) | < 0.1 | | % | 0.1 | | 0.2 | FDA - Title 21 – 177.1500 | 28/07 | 03/08 |
| Extractable fraction in ethanol 95% (8 h at reflux) | < 0.1 | | % | 0.1 | | 1.5 | FDA - Title 21 – 177.1500 | 28/07 | 03/08 |

Microbiological determinations: expanded uncertainty, coverage factor k=2, is stated as 95% confidence level of probability.

N.D.=less than LOD (limit of determination)

Chemical determinations: expanded uncertainty is referred to 95% confidence level. Coverage factor k=2.

The limit of determination (LOD) results as 1/10LOQ*3

N.D= less than LOQ (limit of quantification)

OPINIONS AND INTERPRETATIONS: (not subject to accreditation Accredia)

Regarding the parameters analyzed, the sample complies 21 CFR 177.1500

pH is registered under number 013 on the regional list of approved laboratories for analysis in the context of self-control procedures in the food industry (LR Tuscany No. 9 09/03/2006).

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N°17-FC01994

The reported results only refer to the tested sample. u.m. = unit of measurement; unc = uncertainty; Sample conditions at the arrival are recorded in the laboratory managing system. Food and not perishable samples are store for 30 day from the arrival date. Water, compost and perishable samples are stored until the emission of the Test Report.

Date, 08/08/2017



per il Responsabile di Laboratorio dott. Fabrizio Ferraro

Jenaro

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