

STATEMENT OF COMPLIANCE WITH FOOD CONTACT REGULATIONS

NATIVIA® D804 NATIVIA® D808 NATIVIA® D812 NATIVIA® D820 NATIVIA® N130 NATIVIA® N160 NATIVIA® NBSS NATIVIA® NTSS NATIVIA® NZSS

Taghleef Industries S.p.A. declares that the above listed BOPLA films, when leaving the factory, have a composition that complies with the following requirements for food contact applications:

1. EUROPEAN UNION: Articles 3, 11 (5), 15 and 17 of Regulation (EC) No. 1935/2004 and Regulation (EU) No. 10/2011 (including its amendments up to Regulation (EU) 2023/1627). Monomers, additives and other starting substances are listed in the Annex I of the Regulation (EU) No. 10/2011. Migration tests, carried out following the Regulation (EU) No. 10/2011 (simulants A, B, D2 at the condition of 10 days at 40°C), confirm an Overall migration results below to 10 mg/dm² (as reported here below):

Simulant A (mg/dm²)	Simulant B (mg/dm ²)	Simulant D2 (mg/dm²)
<1	1.6	3.3

In order to verify the compliance of annex II of Regulation (EU) 10/2011, a specific migration analysis has been carried out concerning the metals (simulant B for 10 days at 60°C). Herewith we report the analysis' results.

Metals	Simulant B (mg/Kg)	Simulant B (mg/Kg) Metals	
Aluminium	<0.5	Iron	<0.5
Antimony	<0.02	Lanthanum	<0.01
Arsenic	<0.01	Lead	<0.01
Barium	<0.02	Lithium	<0.02
Cadmium	< 0.002	Manganese	0.032
Chrome	0.014	Mercury	<0.01
Cobalt	<0.02	Nickel	0.015
Copper	<0.1	Terbium	<0.01
Europium	<0.01	Zinc	<1
Gadolinium	<0.01		

The above listed films do not contain any other substances for which a specific migration limit (SML) is established.

In accordance with Regulation (EC) No. 2023/2006 TI S.p.A. films are manufactured in compliance with general rules on good manufacturing practice (GMP).

2. ITALY: D.P.R. 777/82 and D.M. 21.3.1973 and following modifications of Italian Law up to the present date.

3. **DUAL USE ADDITIVES**: The following dual use additives subject to restriction in food as defined in Regulation (EC) No. 1333/2008 and Regulation (EU) No. 10/2011 are present in the above mentioned film:

Lactic Acid E270Citric Acid E330Silicon dioxide E551

Their migration is lower than the overall migration reported at point 1

 $\underline{\textbf{4. PHTHALATES}} : \text{the phthalates are not intentionally added in the above mentioned films.}$

<u>5. USA</u> The subject Taghleef products may be suitably used in contact with food for U.S. Food & Drug Administration (FDA) Conditions of Use "C" through "G", with no thermal treatment of food packaged in it, and its ingredients are in compliance with U.S. FDA regulations as approved per 21 CFR 182, 184, and 186 as applicable, and per current U.S. FDA Inventory (List) of Effective Food Contact Substance Notification.

USE NOTE: metallised side cannot be used in direct contact with food.

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Customers must check that their use of our films is safe and technically suitable in their applications. The final item producer is responsible for the evaluation of global/specific migration at the real time/temperature conditions.

This document is in compliance with the art. 16 of Reg. 1935/2004/EC and it is specifically made for Taghleef Industries S.p.A. customers.

Declaration is valid starting from the below issue date, and will be modified in the case of significant modification in our products formula structure or in the case of legislation amendments.

The Customer has the responsibility to check periodically the update of the present document.

Film guarantee: please refer to the product specification.

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Revision: 23/11/2023	Issued by Regulatory Affairs Supervisor Simone Tacco	Shore Town	Page 2 of 2

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Product Specifications:

HS Taghleef Industries S.p.A. Products

Health and Safety Guidelines for the Use of NATIVIA® Films

	Function	Manager's signature	Date
Issue	AQ	SiD	
Verification	AQ	Thoseute	13.06.2016
Approval	PROD	lores	
Revision	4	Total number of pages (excluding attachments)	6

This document is conform to the requirements of EC Regulation 1907/2006.



SECTION 1: Identification of the product and the company

1.1 Product identifier:

Bioriented polylactic acid film.

1.2 Typical applications:

Food packaging, Adhesive tape and Labels.

1.3 Details of the supplier of the safety data sheet:

TAGHLEEF INDUSTRIES S.p.A.

:

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Web site

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1.4 Emergency Phone Call:

(From 08.30 am to 19.00 pm) +39 0431 627 111

SECTION 2: Hazards identification

2.1 Classification of the product:

According to Regulation 1272/2008/EC and Regulation 1907/2006/EC and subsequent amendments this product is not classified as dangerous.

2.2 Label elements:

According to Regulation 1272/2008/EC and Regulation 1907/2006/EC and subsequent amendments for this product is not required a labelling.

2.3 Other hazards:

- The molten product adheres to the skin and cause burns.
- Risk of slipping due to the presence of material scattered on the floor.
- Avoid the accumulation of polylactic acid powder.
 If it is not possible, avoid the accumulation of electrostatic charges or any other source of ignition. In these cases it is advisable to consult an expert.



SECTION 3: Composition/information on ingredients

This product does not contain any substances to be mentioned according to the criteria of section 3 of Regulation 1907/2006/EC annex II.

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aid measures after inhalation:

Polylactic acid powder is considered to be chemically inert. If inhaled, move affect person to fresh air and seek medical advice.

First-aid measures after skin contact:

The molten product adheres to the skin and causes burns: cool immediately the affected part with clean cold water and seek medical attention, do not remove in any case the solidified polymer from the skin.

First-aid measures after eye contact:

Flakes or powder of polylactic acid may cause irritation to the eyes. In case of contact with eyes, rinse thoroughly with water and seek medical attention.

First-aid measures after ingestion:

Seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed:

Symptoms/injuries after inhalation:

Inhalation of dust may cause irritation of respiratory system.

Symptoms/injuries after skin contact:

The melted product can cause severe burns.

Symptoms/injuries after eye contact:

Flakes or powder of polylactic acid may cause irritation to the eyes.

4.3. Indication of any immediate medical attention and special treatment needed:

Treat symptomatically.



SECTION 5: Fire fighting measures

5.1. Extinguishing media:

All fire extinguishers, taking into account the environment in which the fire could develop. For example, the presence of other materials such as flammable solvents and electrical equipment may impose restrictions.

It is advisable to ask for specific guidance to the fire department.

5.2. Special hazards arising from the substance or mixture:

Hazardous fumes can be given off, which should not be inhaled, containing mostly containing mostly water (H_2O) and carbon dioxide (CO_2) in the absence of oxygen, carbon monoxide (CO) and aldheydes.

5.3. Advice for fire fighters

The fire-fighters must wear protective clothing and breathing apparatus.

SECTION 6: Accidental release measures

Not applicable.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Be sure not to leave on the floor pieces of polylactic acid film that can make it slippery.

Safety shoes and appropriate personal protective equipment must be always worn by the personnel involved in handling and moving the film reels.

Polylactic acid film reels should be moved with appropriate equipment only.

Converting and Packaging Machinery:

In some polylactic acid film a small amount of antistatic additives is used in order to avoid the accumulation of electrostatic charges.

It is still recommended to equip the machines with appropriate anti-static systems to eliminate and neutralize the electrostatic charges.

Heat-Sealing:

Do not touch molten polymers or heat-sealing until cooled.

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7.2. Conditions for safe storage, including any incompatibilities

No special conditions are required for the storage of polylactic acid films but it is recommended to keep in a cool and dry place, below $30 \, ^{\circ}\text{C}$.

The pallets must be stored and handled carefully in accordance with specific rules and/or safety standards.

It is recommended to act in accordance with the general rules relating to fire prevention.

Film Packaging:

It is recommended to wear appropriate eyes and hands protection systems during package removal.

SECTION 8: Exposure controls/personal protection

Polylactic acid films do not present a specific risk to health or safety.

The powder polylactic acid is considered to be chemically inert and to present a low toxicity, normally it is not dangerous to health, although high concentration may cause irritation of the respiratory tract.

In this case, concentrations in air must be kept under the levels recommended for inert powders and it is recommended to use appropriate personal protective equipment to prevent inhalation.

SECTION 9: Physical and chemical properties

Physical State

Solid

Density

1.24 g/cm³

Melting Point

120-170°C

Auto Ignition Temperature

Not applicable.

SECTION 10: Stability and reactivity

Avoid contact with strong oxidizing agents.

SECTION 11: Toxicological information

No particular indication.



SECTION 12: Ecological information

Polylactic acid films are non - toxic solids, water insoluble, ground neutral and their use do not cause environmental hazards.

SECTION 13: Disposal considerations

Polylactic acid films can be disposed in approved landfills or by incineration.

The complete combustion of polylactic acid leads mainly to the formation of carbon dioxide and water.

Combustion for energy recovery provides on average 19.5 MJ/Kg.

Taghleef Industries S.p.A. polylactic acid films are compostable according to UNI EN 13432.

Compostable certificate is available upon request.

SECTION 14: Transport information

No particular indication.

For films which will come into contact with food we advise the use of covered transport, in order to guarantee the hygiene of the product.

SECTION 15: Regulatory information

According to Regulation 1272/2008/EC and Regulation 1907/2006/EC and subsequent amendments, this product is not classified as dangerous.

SECTION 16: Other information

The information contained in this document is based on our current knowledge and will aim to describe the product only in relation to environmental, health and safety.

This document does not excuse in any case the user from knowing and applying the laws and regulations governing its activities.

The user is required to verify that the material is appropriate for the specific application.

The information contained in this document is subject to revision without prior notice to Customer.



PRODUCT SPECIFICATION

SP 1.79.S

NATIVIA® NTSS

Film di acido polilattico biorientato coestruso, bisaldante, per imballaggio alimentare.

Biaxially oriented coextruded polylactic acid film, both sides heat sealable, for food packaging.

NT

Non trattato

Non treated

TI TO Trattamento interno Trattamento esterno Inside treatment
Outside treatment

Proprietà Property	Metodo Method		Unità di misura Unit	r b a con v s con l a gas	The second secon	iferimento ce value	11.0	Intervallo di variazione Range of variation
Spessore nominale Nominal thickness	72	_	μm	20	25	30	40	± 5% (*)
Grammatura Unit weight	Internal Method	2	g/m²	24.8	31.0	37.2	49.6	± 7% (*)
Carico a Rottura Tensile Strength	ASTM	MD TD	N/mm ²	105 205		≥ 70 ≥ 140		
Allung. a Rottura Elongation at		MD TD	%	185 85			≤ 230 ≤ 120	
Haze	ASTM D 1003	.	%		1.5		1.8	≤ 4.0
C.O.F. dinamico Dynamic C.O.F.	Internal Method	NT/NT or non converting side	-	0.35		≤ 0.70		
Saldabilità Seal Strength	85° C 2.7 bar 0.5 s	NT/NT or non converting side	g/cm	230	230 290 350		≥ 180	
TMS MST	Internal Method	NT/NT or non converting side	°C	85			≤ 95	
Bagnabilità	ASTM	Tipo NT	mN/m	37		≥ 37		
Treatment level	D 2578	Tipo TI/TO	HIIN/III	43		45		≥ 40

(*) Valore riferito alla singola bobina. Referred to single reel.

(**) Velocità (Speed): 100 mm/min.

Lunghezza provino (Specimen length): 200 mm.

I film sono garantiti fino ad un massimo di 6 mesi dalla data di produzione. Films are guaranteed for a period of 6 months from production date.

NATIVIA® può essere stampato sia con tecnologia flexo che rotocalco. Rispetto ai materiali poliolefinici, necessita di temperature di asciugatura inferiori e di una maggiore ventilazione per ottenere risultati di stampa ottimali. L'etile acetato causa un effetto di rigonfiamento, che può portare ad una completa decomposizione del PLA. E' importante quindi contattare il proprio fornitore di inchiostri e/o adesivi al fine di individuare il miglior prodotto disponibile. Inoltre, si consiglia di effettuare dei test preliminari prima dell'utilizzo del materiale.

NATIVIA® can be converted on flexo- and rotogravure print presses. In comparison to other polyolefin substrates, it needs rather low drying temperatures and a high airflow for best print results. Ethyl Acetate will cause swelling effects up to total disintegration of the PLA. It is important to contact your ink and/or adhesive supplier for best choice of products. Appropriated tests should be carried out before converting.

Dichiarazione di idoneità al contatto alimentare disponibile su richiesta. Food contact declaration available on request.

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