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**FOOD CONTACT COMPLIANCE CERTIFICATE
 OPP FILMS**

WORKS :

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**COMPLIANCE TO
 EEC DIRECTIVES & FDA REGULATIONS**

Website : www.jindalpoly.com

This is to certify that Oriented Polypropylene Films of following types are manufactured and supplied by Jindal Poly Films Limited, comply with food contact regulatory requirements as per EEC Directives and FDA Regulations.

List of OPP Films

Sl. No.	OPP Film Type	Sl. No.	OPP Film Type	Sl. No.	OPP Film Type	Sl. No.	OPP Film Type	Sl. No.	OPP Film Type	Sl. No.	OPP Film Type
1	N1	6	H1-MZ	11	N2-MZ	16	H1-MTZ	21	N1-PL	26	S1-PLG
2	N2	7	H1-MD	12	N2-MD	17	H1-MTD	22	N2-PL	27	N1-AT
3	N1-LH	8	H1-MDB	13	H1-LS / ULS	18	H1-OP	23	H1-PLD	28	N1-BG
4	H1	9	N1-MZ	14	H0-OW	19	H1-PL / PLS	24	H1-PDB	29	H2-PLG
5	S1	10	N1-MD	15	N2-MT	20	H1-PLC	25	S1-PL	30	H1-AF

---Table-1---

Compliance Statement

The OPP film types listed in Table-1 comply with

i. European Economic Commission (EEC) Directive

EEC Directive - 2002/72/EC of 6th August 2002 = repealed Directive 90/128/EEC(1990) and subsequent amendment of 92/39/EEC(1992), 93/9/EEC(1993), 95/3/EC(1995), 96/11/EC(1996), 1999/91/EC(1999), 2001/62/EC(2001), 2002/17/EC(2002).
82/711/EEC and subsequent amendment of 93/8/EEC, 97/48/EEC.
85/572/EEC.

ii. Food and Drug Administration (FDA) Regulation

FDA Regulation and Norms for Food Contact Substance (FCS) Migration = As per the document - **Guidance for Industry – Preparation of Food Contact Notifications and Food Additive Petitions for Food Contact Substances: Chemistry Recommendations.**
 Food Additive regulated for its intended use as per **21 CFR 173 – 178** – exempted from regulation under Threshold of Regulation Process as per **21 CFR 170.39.**
 Identification of Types of foods expected to be used in contact with FCS and maximum temperature and time condition of food contact as per **21 CFR 176.170.**
 Olefin Polymers as Indirect Food Additive as per **21 CFR 177.1520.**

Migration Tests

The OPP films types listed in Table-1 are subjected to **Migration Tests** at regular interval at the conditions established by relevant EEC / FDA legislations. The Migration Test Conditions and Test Simulants for Different Food Types along with the Reporting Unit of Migration Values are briefed in Table-2 & Table-3

Test Simulants for Different Food Types / Reporting Unit of Migration Values

Sl. No.	Test Simulants	EEC Requirements	FDA Requirements	EEC Limit (Over All Migration)	FDA Limit (Estimated Daily Intake)
1	Distilled Water	Aqueous Food	-	Maximum Extractable of 10mg/dm ² for Each of the Test Simulants	-
2	3% Acetic Acid	Acidic Food	-		-
3	10% Ethanol	Alcoholic Food	Aqueous & Acidic Food		Maximum Estimated Daily Intake (EDI) of 3 mg/person/day
4	50% Ethanol	Alcoholic Food	Alcoholic Food		
5	95% Ethanol	Fatty Food	Fatty Food		
6	Xylene	-	Olefin Polymers as Indirect	-	Maximum 9.8% by Weight
7	n-Haxane	-	food additive	-	Maximum 6.4% by Weight

---Table-2---

Test Conditions

Sl. No.	Test Simulants	EEC – Test Conditions		FDA – Test Conditions	
		Temperature	Time	Temperature	Time
1	Distilled Water	40 °C / 104 °F	240 hours / 10 Days	-	-
2	3% Acetic	40 °C / 104 °F	240 hours / 10 Days	-	-
3	10% Ethanol	40 °C / 104 °F	240 hours / 10 Days	40 °C / 104 °F	240 hours / 10 Days
4	50% Ethanol	40 °C / 104 °F	240 hours / 10 Days	40 °C / 104 °F	240 hours / 10 Days
5	95% Ethanol	40 °C / 104 °F	240 hours / 10 Days	40 °C / 104 °F	240 hours / 10 Days
6	Xylene	-	-	25 °C	Time for attaining to 25 °C
7	n-Hexane	-	-	Reflux Temperature	2 hours

---Table-3---

i. European Economic Commission (EEC) Directive Compliance

The Extraction Values (mg/dm²) for all types of OPP Films listed in Table - 1 are within the Over All Migration Limit of Maximum 10 mg/dm² for each of the Test Simulants.

ii. Food and Drug Administration (FDA) Regulation Compliance

a. The Estimated Daily Intake (EDI) calculated from Extraction Values (mg/in²) for all types of OPP Films listed in Table - 1 are within the EDI Limit of Maximum 3mg/p/d for all of the Test Simulants.

b. The Maximum Soluble Fraction in Xylene for all types of OPP Films listed in Table - 1 are within the Limit of Maximum 9.8 %.

c. The Maximum Extractable Fraction in n-Hexane for all types of OPP Films listed in Table - 1 are within the Limit of Maximum 6.4%.

The above statement refers only to OPP films as such listed in Table –1. In case of Metallised Films (H1-MD, H1-MDB, N1-MD, N2-MD, H1-PLD, H1-PDB, H1-MTD) the statement only applies to the Non-Metallised layer.

Notes for Information Purpose Only

1. This certificate is issued on basis of the tests carried out at in-house facility and the results obtained there of.
2. According to the EEC Directive / FDA Regulations, the Migration Limits has to be controlled on the finished articles intended to come in to contact with foodstuffs. Migration Tests on the final material or article will determine the regulatory suitability for contact with different food types and various end use applications.

Since the OPP films are being converted to laminates and subjected to printing and lamination using different adhesives, printing inks, over print varnishes and other substrates, this is the responsibility of the converter / user of the OPP films to determine and satisfy the regulatory suitability for food contact compliance of converted OPP films.

However these are beyond the control of Jindal Poly Films Limited, and hence Jindal Poly Films Limited makes no warranties, express or implied and has no liability in connection with the regulatory suitability for food contact compliance of converted OPP films.

3. The raw material used for manufacturing of OPP films are duly certified for regulatory suitability of food contact compliance for migration limit according to EEC Directives / FDA Regulations by concern raw material suppliers.

Abbreviations Used:

- OPP : Oriented Polypropylene
- EEC : European Economic Commission
- FDA : Food and Drug Administration
- EDI : Estimated Daily Intake
- FCS : Food Contact Substance

The statements given above are based on in-house tests and the results obtained there of, at the current level of information and knowledge, which covers OPP Films supplied by Jindal Poly Films Limited. However, the customer must make their own determination and analysis that use of our product is safe, lawful and technically suitable in their intended use. Since the conditions of use is beyond our control, Jindal Poly Films Limited makes no warranties, express or implied and assume no liability with any use of this information.

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