

HS (H)

Description

HS (H) is a bi axially orientated polypropylene film with both surfaces heat sealable, especially designed with high slip and low antistatic properties to offer excellent machinability on high speed automatic packaging (HFFS & VFFS). Widely used on machines for packing straws, cassettes, confectioneries etc.

Properties

White heat seal range
High slip and low antistatic property
Superior machinability
Good heat seal and strength
Good optical and mechanical properties
Good resistance to most oils, fats and chemicals
Good barrier to moisture, odour and gases
Conforms to FDA Guidelines

Properties	Unit	Typical Values							Test Method
Thickness	Microns	18	20	25	30	35	40	48	ASTM D 374
Grammage	gm/m ²	16.38	18.2	22.75	27.3	31.85	36.4	43.68	GPIM
Yield	m ² /kg	61.05	54.95	43.96	36.63	31.39	27.48	22.89	GPIM
Haze	%	2.5							ASTM D 1003
Gloss (45°)		85							ASTM D 2457
+ Tensile Strength	MD	15 _ 1							ASTM D 882
	TD	Kg/mm ² 28 _ 3 +							
Elongation	MD	170 + 30							ASTM D 882
at Break	TD	50 _ 15							
Coefficient of Friction	Film/Film	0.25							ASTM D 1894
	MD	4.0							GPIM
Thermal Shrinkage	TD	2.0							120°C, 5 min, air
		38							
Surface Tension	Dyne/cm	105 - 140							ASTM D 2578
Heat Seal Range	°C								GPIM
Heat Seal Strength	Film/Film	> 275							GPIM
	gm/15mm	130°C, 1bar, 1 sec							

HS (H) fully meets the EC Directive 94/62/EC, 2002/72/EC and USA FDA Code of federal regulations CFR21 section 177.1520 (Olefin Polymers) is suitable for food packaging.

The information contained in this brochure is to the best of our knowledge & experience. Since the conditions under which our products maybe used are beyond our control, recommendations are made without warranty or guarantee.

Bi-axially oriented polypropylene film ages with time and will exhibit deterioration of properties if it is not stored in a dry environment at a temperature 30 °C or below. We highly recommend our customer to use recommended storage conditions and consume product before 6 months from the date of production.

For related spec sheet with tolerance values, please contact our sales department.

Food Contact Compliance Declaration - January 2018 - All Bag styles incl Crimp/Titan

We declare that the delivered BOPP films – Used

Are in conformity with the following laws, directives and regulations and therefore suitable for the direct contact to food stuffs:

Framework regulation 1935/2004/EC of the European parliament and of the Council of 27th October 2004 on materials and articles intended to come into contact with food and repealing Directives 80/590/79/EEC, 89/109/EEC

EU Regulation 10/2011/CE from May, 2011 (which replaces EC Directive 2002/72/EC and it's amendments), these conditions may continue to be used to demonstrate safety of food contact plastics until January 2016

European Directive 2002/72/EC and subsequent AMENDMENTS 2004/19EC, 2005/79/EC, 2007/19/EC, 2008/39/EC. 975/2009/EC

Commission regulation (EC) 2023/2006 of 22 December, 2006 on good manufacturing practice for materials and articles intended to come into contact with food

Italy: Decreto Ministeriale (D.M) 21- 3-1973 and amendment DPR777/82 of 23 August 1982 and amendments

USA: FDA Regulations CFR Title 21 177.1520(c) (1.1) and (3.1) CFR 178.3297 - 178.2010.

Germany: Bedarfsgegenstandeverordnung vom 10 April 1992 as amended up to 08.08.2007.LFGB - 26.02.2008 - BFR Empfehlung VII - Polypropylene. Stand Vom 01.01.2010

Table 1. Following are listed chemical substances with Specific Migration Limit (SML) are present with a lower content than the limit fixed according to European Directive 2002/72EC:

Chemical Name	PM REF NO	CAS NO	SML
Alkyl amin	39090	071786-60-2	1.2 m/kg
Slip agent	68400	010094-4-45-08	5 mg/kg
Technical support agent	74880	74880	0.3 mg/kg

The SML will not be exceeded even with a 100% (worst case) migration.

Table 2. Overall migration tests were conducted by using the following food Simulants and test conditions listed below. The food Simulants and test conditions are those defined in EC Directive 97/48/EC. Under the transitional arrangements contained in EU regulation 10/2011/CE from 2011, (which replaces EC Directive 2002/72/ECC and its amendments) these conditions may continue to be used to demonstrate safety of food contact plastics until 1st January 2016.

Food Simulants	Test Conditions	
	Duration	Temperature
Simulants B - 3% W/V Acetic acid	10 days	40 °C
Simulants C - 10% V/V Ethanol	10 Days	40 °C
Simulants D - Rectified Olive Oil	10 Days	40 °C

The overall migration results obtained were found to be below the overall migration limits defined in EC Directive 2002/72/EC as amended.

OPP Films

Food Contact Compliance Declaration

Table 3. Presence of Dual - Use additives (Food Additives):

Chemical Name	PM REF NO	CAS NO	SML	Dual - Use
Alkyl amin	39090	071786-60-2	1.2 m/kg	No
Slip agent	68400	010094-4-45-08	5 mg/kg	No
Technical support agent	74880	74880	0.3 mg/kg	No

The product does not comprise any "dual use" substances as mentioned by the European Directive 2004/19/EC.

The product does not comprise any Mineral Oils.

The product compliance with requirements of European Directive 90/128/EC

The product compliance with requirements of European Directive 94/62/EC and following amendments

The product compliance with requirements of European Directive 1895/2005/EC

The product compliance with requirements of European Directive 84/2005/EC

The product compliance with requirements of European Directive 282/2008/EC

When a plastic functional barrier is used in a plastic multi-layer material or article, it must be confirmed that the material or article complies with the requirements of Article 7a(2),(3) and 4 of directive 2007/39/EC.

This confirmation applies to above specified goods delivered by us. All statements or recommendations are based on data and knowledge considered to be true and accurate at the time of printing but should be verified by the user. In addition the user of our products should satisfy himself as to the suitability of our products for the intended applications. Therefore, we disclaim any liability for damages arising from the non-suitability of our products for the effected application and any quality modification of the packed product due to chemical reaction with the packaging material or its components.