Product Specification

Material Type – AP3002 Polypropylene (AP50)

Properties	Units	Values	Method-ISO
Rheological			
Melt flow index	g/10min	**3**	1133
Thermal			
Melting point	° C	**165**	3146
Vicat softening point -			306
50N-50° C per hour	° C	**93**	
10N-50° C per hour	° C	**153**	
Heat deflection temperature -			75-2
1.80 MPa-120° C per hour	° C	**57**	
0.45 MPa-120° C per hour	° C	**105**	
Mechanical			
Notched Izod impact strength (23° C)	kJ/m²	**5**	180
Notched Charpy impact strength (23° C)	kJ/m²	**6**	179
Tensile strength at yield	MPa	**37**	527-2
Elongation at yield	%	**9**	527-2
Tensile modulus	MPa	**1800**	527-2
Flexural modulus	MPa	**1700**	178
Rockwell hardness	--	**R95**	2039-2
Miscellaneous			
Density	g/cm³	**0,905**	1183
Bulk density	g/cm³	**0,525**	1183

Declaration of Compliance with Food Contact Legislation *(AP43)*

APL3002,3003,3004,3005,3006,3007&3008 Polypropylene

This document is declaration of compliance within the meaning of Article 16(1) of Regulation (EC) No. 1935/2004 on materials and articles intended to come into contact with food.

General Product Information

I) Name and Address of Producer;

APL Plastics Limited, Brunel Road, Houndmills Industrial Estate, Basingstoke, Hampshire, RG21 6TZ

II) Description of Product;

3002-3008 - Clear Polypropylene Sheet – thickness and width specific to customer order

Suitable for direct food contact

Suitable for use in the microwave. Suitable for use in the chiller cabinet and freezer use may also be possible

The material should always be tested, once formed, in the environment within which it will be commercially used in order to ascertain whether the mechanics of this material are 'good for purpose'

III) Date – 04.07.18

Compliance with Food Contact Legislation

All Finished Product including colour pigment complies with all current legislation;

The requirements of the Food Safety Act 1990 and its associated regulations. Specifically;

- *i) The Framework Regulation 1935/2004/EC which is adopted in England by SI2005 no.898 The Materials and Articles in Contact with Food (England) Regulations 2005 and also 1895/2005 regarding the use of epoxy derivatives*
- *ii) Packaging (Essential Requirements) Regulations 1998.*
- *iii) Commission Regulation (EU) No.10/2011 (14.01.2011) on plastic materials and articles intended to come into contact with food, ANNEX I, Table 1 and its amendments;*

  Commission Implementing Regulation (EU) no.321/2011 (01.04.2011)
  Commission Regulation (EU) No.1282/2011 (28.11.11)
  Commission Regulation (EU) No.1183/2012 (30.11.12)

Commission Regulation (EU) No.202/2014 (03.03.14)
Commission Regulation (EU) No.174/2015 (05.02.15)
Commission Regulation (EU) No.1416/2016 (24.08.16)
Commission Regulation (EU) No.752/2017 (28.04.17)
Commission Regulation (EU) No.831/2018 (26.06.18)

iv) *The Plastics Directive 10/2011/EC (PIM),2004/1, 2004/19 and 90/128/EEC (95/3/EC and 96/11/EC amendment), SI 3145 1992 concerning migration of substances into foodstuffs, the approved substances list and the materials and articles being manufactured to best practices principles and subsequent amendments 2007/19/EC, 2008/39/EC and UK Statutory Instrument 3145*

v) *SI 2012 No.2619 The Materials and Articles in Contact with Food (England) Regulations 2012*

vi) *Commission Regulation (EC) No.2023/2006 on good manufacturing practice for materials and articles intended to come into contact with food*

vii) *FDA Regulation 21 CFR177.1520(c), item 1.1a, for the safe use of olefin polymers in articles or components of articles intended for food contact with all Food Types as set forth in Table 1 of FDA Regulation 21 CFR176.170(c) and Conditions of Use a-H as set forth in Table 2 of FDA Regulation 21 CFR176.170(c)*

None of the designated metals (Lead, Cadmium, Mercury, and Chromium) or compounds of these metals are used as additives or raw materials in the manufacture of our Sheet. The total levels of such metals is therefore far below the limit of 100 ppm given in Packaging (Essential Requirements) Regulations 1998, legislation in Europe (EU Packaging and Packaging Waste Directive 94/62/EC) or the USA (CONEG Regulation).

To be more specific, further independent analysis of our Polypropylene raw material has found the level of these metals to be as follows;

Method Sample preparation in 3% acetic acid (w/v) in aqueous solution at 70 °C for 1 hour, then 40 °C for 9 days and 23 hours to EN13130-1:2004; followed by analysis using inductively Coupled Argon Plasma Spectrometry (ICP) (1st Migration)			
Test item	*Result (mg/kg)*	*Sample (mg/kg)*	*Permissible limit (mg/kg)*
	1		
Barium	*Not Detected*	*0.25*	*1*
Cobalt	*Not Detected*	*0.03*	*0.05*
Copper	*Not Detected*	*0.25*	*5*
Iron	*Not Detected*	*0.25*	*48*
Lithium	*Not Detected*	*0.5*	*0.6*
Manganese	*Not Detected*	*0.25*	*0.6*
Zinc	*Not Detected*	*0.5*	*25*
Comment	***PASS***	**-**	**-**

Method Sample preparation in 3% acetic acid (w/v) in aqueous solution at 100 °C for 2 hours with reference to EN13130-1:2004; followed by analysis using inductively Coupled Argon Plasma Spectrometry (ICP) (1st Migration)			
Test item	*Result (mg/kg)* *1*	*Reporting Limit (mg/kg)*	*Permissible limit (mg/kg)*
Barium	*Not Detected*	*0.25*	*1*
Cobalt	*Not Detected*	*0.03*	*0.05*
Copper	*Not Detected*	*0.25*	*5*
Iron	*Not Detected*	*0.25*	*48*
Lithium	*Not Detected*	*0.5*	*0.6*
Manganese	*Not Detected*	*0.25*	*0.6*
Zinc	*Not Detected*	*0.5*	*5*
Aluminium	*Not Detected*	*0.1*	*1*
Comment	***PASS***	**-**	**-**

Independent Migration Tests details the conformance of our material to current migration standards of migration of plastic packaging materials into foodstuffs;

Stimulant	*Conditions*	*Migration (mg/dm²)*	*Permissible limit (mg/dm²)*
3% Acetic Acid	*1 hour @ 70°C* *9 days 23 hours @ 40 °C*	*0.1*	*10.0*
95% Ethanol	*1 hour @ 60°C* *9 days 23 hours @ 40 °C*	*<0.1*	*10.0*
Iso-octane	*1 hour @ 40°C* *9 days 23 hours @ 20 °C*	*1.5*	*10.0*
Comment	**-**	***PASS***	**-**

Stimulant	*Conditions*	*Migration (mg/dm²)*	*Permissible limit (mg/dm²)*
3% Acetic Acid	*2 hours @ 100 °C*	*Not Detected*	*10.0*
10% Ethanol	*2 hours @ 100°C*	*Not Detected*	*10.0*
Iso-octane	*1 hour @ 121°C*	*4.4*	*10.0*
Comment	**-**	***PASS***	**-**

The material is approved for Direct Food contact applications.

All manufactured material is fully REACH (Registration, Evaluation, Authorisation and restriction Of Chemicals) compliant.

The following chemicals are not present or used in the manufacture of our material; Phthalates, 4-methylbenzophenone, Benzophenone, Hydroxobenzophenone and Bisphenol A.

All material is free from known allergens and nuts and nut derivatives including peanut residues are not used in the manufacturing process.

With regard to the environment the materials do not incorporate any known Ozone Depleting Substances.

The material does not contain any post-consumer recycled materials

The material has been reviewed against the customer's requirements and there have been no identified limitations to use

APL Plastics Limited is accredited to the BRC/IoP Global Standard for Packaging and Packaging Materials, Issue 5 – High Hygiene.

This Declaration of Compliance describes the status of the product specified under General Product Information. The user of the product (or downstream user, if applicable) is responsible for ensuring that the finished food packaging complies with applicable migration limits in the food itself under actual conditions of use. Furthermore, the food packer is responsible for verifying possible interactions of the product or its components with foodstuffs (e.g.; modification of odour, taste, consistency, migration, etc.) which need to be checked prior to commercial use.