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HIGH PERFORMANCE HOMOPOLYMERS

Marlex[®] HGX-030SP Polypropylene

HOMOPOLYMER

This polypropylene homopolymer is tailored for applications that require:

- Good resistance to gas fading

Typical raffia, fiber/yarn applications include:

- Woven industrial fabrics and bags
- Rope and cordage
- Woven carpet backing
- Woven geotextile fabrics

This resin meets these specifications:

- FDA 21 CFR 177.1520(c)1.1. May be used in contact with all types of foods per Table 1 of 21 CFR 176.170 (c) at conditions of use A through H per Table 2 of 21 CFR 176.170(c).
- All constituents of this resin are listed in Commission Regulation (EU) No 10/2011. Meets the requirements of Commission Regulation (EU) No 10/2011, Regulation (EC) No. 1935/2004, and Commission Regulation (EC) No 2023/2006.

For a Safety Data Sheet (SDS), visit our site at www.saudipolymers.com

Nominal Resin Properties ^(1,2)	Value (SI Units)	Method
Density	0.906 g/cm ³	ASTM D1505
Melt Flow Rate, 230 °C/2.16 kg	3 g/10 min	ASTM D1238
Tensile Strength at Yield, 50.8 mm/min	37 MPa	ASTM D638
Flexural Modulus, Secant, 1.3 mm/min	1,590 MPa	ASTM D790
Notched Izod Impact, 23 °C	31 J/m	ASTM D256
Durometer Hardness, Type D (Shore D)	70	ASTM D2240
Heat Deflection Temperature, 0.46 MPa	101 °C	ASTM D648

1. The nominal properties reported herein are typical of the product, but do not reflect normal testing variance and therefore should not be used for specification purposes. Values are rounded.
2. Mechanical properties were determined using injection-moulded specimens 3.2 mm thick, moulded per ASTM D4101, unless otherwise noted.

Revision Date: March, 2017



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NSF113D

Characteristics and Applications:

BOPP for packaging film.

Typical Properties

STT. No.	Tên chỉ tiêu/ Properties	Đơn vị/ Unit	Phương pháp/ Test methods	NSF113D BOPP
1	Chỉ số chảy <i>Melt flowrate index</i>	g/10 phút g/10min	ASTM D 1238	3.0
2	Tỷ trọng/ <i>Density</i>	g/cm ³	ASTM D1505	0.91
3	Chỉ số đẳng cấu/ <i>Isotactic index</i>	%	PP-F-107	98
4	Độ tan trong Xylene/ <i>Xylene Solubility</i>	%	ASTM D 5492	2.5
5	Độ bền kéo / <i>Tensile yield stress</i>	MPa	ASTM D 638	36
6	Độ giãn <i>Elongation at break</i>	%	ASTM D 638	>200
7	Mô-đun uốn/ <i>Flexural modulus</i>	MPa	ASTM D 790	1520
8	Độ bền va đập Izod ở 23°C/ <i>Noched Izod impact strength 23°C</i>	J/m	ASTM D 256	39
9	Độ cứng <i>Hardness (Rockwell)</i>	R scale	ASTM D 785	95
10	Điểm mềm hóa Vicat (10 N), <i>Vicat Softening Temperature (10 N)</i>	°C	ASTM D 1525	155
11	Nhiệt độ biến dạng (0.45 Mpa), <i>Deflection temperature (0.45 Mpa)</i>	°C	ASTM D 648	110

Note: These values are not guranteed physical properties of future NSRP PP products, and could be changed without notice.

SABIC® PP 500P

POLYPROPYLENE HOMOPOLYMER

DESCRIPTION

SABIC® PP 500P is a medium flow, multipurpose grade for extrusion and injection molding applications.

TYPICAL APPLICATIONS

If applied for extrusion 500P shows an excellent stretch ability and is therefore suitable for tapes and strapping, high tenacity yarns and carpet backing. It can also be used in ropes and twines, woven bags, flexible intermediate bulk containers, geotextiles and concrete reinforcements.

For thermoforming it shows a unique balance between transparency, impact resistance and thickness uniformity.

500P is also suitable for production of injection molded articles e.g. caps and closures and house ware products, where this grade shows a high stiffness, combined with a fair impact resistance and very good surface hardness.

TYPICAL PROPERTY VALUES

Revision 20170706

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate			
at 230 °C and 2.16 kg	3.1	dg/min	ISO 1133
Density	905	kg/m ³	ASTM D1505
Molecular Weight Distribution	Broad	-	-
Isotacticity	Medium	-	-
FORMULATION			
Anti static agent	<input type="checkbox"/>	-	-
Nucleating agent	<input type="checkbox"/>	-	-
Gas fading stabilized	<input type="checkbox"/>	-	SABIC method
MECHANICAL PROPERTIES			
Tensile test			
stress at yield ⁽¹⁾	37	MPa	ISO 527-2 1A
tensile modulus ⁽²⁾	1550	MPa	ISO 527-2 1A
strain at yield	10	%	ISO 527-2 1A
Izod impact notched			
at 23 °C	3.5	kJ/m ²	ISO 180/1A
Charpy Impact Strength Notched			
at 23 °C	4.5	kJ/m ²	ISO 179/1eA
THERMAL PROPERTIES			
Heat deflection temperature			

Polypropylene Homopolymer

Woven Sacks

Product Description:

PP Homopolymer P1030RG is a natural colored grade produced by the latest Spheripol II Technology with following features:

- Excellent Processability
- Low water carry over
- Good balance of tenacity & elongation

Recommended Application:

PP Homopolymer P1030RG is recommended for manufacturing of stretched tapes for applications like

- Cement, Polymers & Fertilizers packaging
- Fabrics for general packaging
- Food grains packaging
- FIBC for bulk industrial packaging
- Carpet Backing

Typical Properties:

Tested Properties	Test Method	UOM	Values*
Resin Properties			
Melt Flow Index (230°C & 2.16 Kg)	ASTM D 1238	gm/10 min	3.3
Mechanical Properties			
Tensile Strength @Yield (50mm/min)	ASTM D 638	MPa	35
Elongation @ Yield (50 mm/min)	ASTM D 638	%	12
Flexural Modulus (1.3 mm/min)	ASTM D 790	MPa	1550
Notched Izod Impact Strength @ 23°C	ASTM D 256	J/m	50
Thermal Properties			
Heat Deflection Temperature (0.46 N/m2)	ASTM D 648	°C	95
Vicat Softening Point (10 N)	ASTM D 1525	°C	156

*Typical values not to be construed as specification limits. Values may change without any prior notice

*Mechanical properties tested on specimen molded as per ASTM D 4101 and conditioned as per ASTM D 618

Recommended Processing Temperature: 170 – 230°C

Packaging Information:

This material is packed and available in raffia bags with net content of 25.0 Kg only. The raffia bags used conforms to the minimum strength requirements of BIS, however, customer shall take due care while handling the bag. Prolonged exposure of these bags to sunlight may deteriorate the bag's performance and cause spillage and wastage. IOCL does not warranty loss of material due to poor material handling practices.

Regulatory Information:

PP Homopolymer P1030RG shall meet the requirements stipulated in IS 10910 on 'Specification for Polypropylene and its Copolymers for safe use in contact with Foodstuff, Pharmaceutical & Drinking water'. The grade and Additives incorporated in this grade shall meet the positive list of constituents as prescribed in IS 10909. The Grade and the additives incorporated in it will also comply with the FDA: CFR Title 21,177.1520, Olefin Polymers.

Storage & Handling:

Prevent PP Material from direct exposure to sunlight & heat to avoid quality deterioration. The storage location should be dry, dust, dust free and the Storage temperature should not exceed 50°C. Non – compliance to these precautionary measures can lead to degradation of the product causing Color changes, Odor & inadequate product performance. It is advised to process PP material within 06 months after delivery.

Disclaimer: IOCL assumes no liability whatsoever in respect of application, processing or any use made of the aforementioned information or products, or any consequence thereof. No liability whatsoever shall be attached to any of the IOCL companies for any infringement of the rights owned or controlled by a third party in intellectual, industrial or other property by reason of application, processing or use of the aforementioned information or products by the user.



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BSR™ T3034

Polypropylene Homolymer

BinhSon Refining & Petrochemical Co.,Ltd



General

Material Status	. Comercial: Active
Availability	. Asia Pacific
Features	. Goods Stiffness . High Rigidity . Homolymer
Uses	. Carpet Backing . Monofilaments
	. High Tenacity Flat Yarn . Rope
Forms	. Pellets
Processing Method	. Extrusion

Physical	Nominal Value Unit	Test Method
Density	0.91 g/cm ³	ASTM D1238
Melt Mass-Flow Rate (MFR) (230°C/2.16kg)	3.4 g/10min	ASTM D1238
Hardness	Nominal Value Unit	Test Method
Rockwell Hardness (R-Scale)	95	ASTM D785
Mechanical	Nominal Value Unit	Test Method
Tensile Strength Yield	38 MPa	ASTM D638
Flexural Modulus	1150 MPa	ASTM D790
Impact	Nominal Value Unit	Test Method
Notched Izod Impact (23°C)	45 J/m	ASTM D256
Thermal	Nominal Value Unit	Test Method
Deflection Temperature under load 0.45 Mpa	110 °C	ASTM D1525
Viscat softening point 66psi	155 °C	ASTM D648

Notes

¹ Typical properties: these are not to be construed as specifications.



H030SG HOMOPOLYMER

FOR WOVEN SACKS AND MONOFILAMENTS

Repol H030SG is recommended for **Raffia Tapes** used in making woven fabrics for sacking, carpet backing, industrial packaging and geotextile applications. Repol H030SG combines good processability on water bath and chill-roll with excellent mechanical properties. Formulated for low water carry-over.

Typical Characteristics			
Property	Test Method	Unit	Typical Value*
Melt Flow Rate (230°C/2.16 kg)	ASTM D1238	g/10 min	3.4
Tensile Strength at Yield (50 mm/min)	ASTM D638	MPa	34
Elongation at Yield (50 mm/min)	ASTM D638	%	10
Flexural Modulus (1% secant)	ASTM D790A	MPa	1650
Notched Izod Impact Strength (23°C)	ASTM D256	J/m	40
Heat Deflection Temperature (455 kPa)	ASTM D648	°C	104

* Typical values, not to be taken as specification. All the mechanical properties as per ASTM D638 Type I specimen injection moulded in accordance with ASTM D4101

Applications

Woven fabrics, sacks & monofilaments

Regulatory Information

- Meets the requirements stipulated in IS 10910 on 'Specification for Polypropylene and its Copolymers for safe use in contact with foodstuff, pharmaceuticals, and drinking water'. Additives incorporated in this grade conform to the positive list of constituents as prescribed in IS 10909. The grade and the additives incorporated in it also comply with the FDA:CFR Title 21,177.1520, Olefin polymers

Storage Recommendations

- Bags should be stored in dry / closed conditions at temperatures below 50°C and protected from UV / direct sunlight

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Updated as of Oct. 2008



H034SG HOMOPOLYMER FOR BOPP FILMS

Repol H034SG is recommended for use in **Oriented Film** process. Repol H034SG is suitable for low thickness films and processing on high line speeds. Repol H034SG is the material of choice for BOPP films used in adhesive tapes, food packaging, cigarette & textile overwraps, synthetic paper, etc.

Typical Characteristics			
Property	Test Method	Unit	Typical Value*
Melt Flow Rate (230°C/2.16 kg)	ASTM D1238	g/10 min	3.4
Tensile Strength at Yield (50 mm/min)	ASTM D638	MPa	36
Tensile Elongation at Yield (50mm/min)	ASTM D638	%	12
Flexural Modulus (1% secant)	ASTM D790A	MPa	1350
Notched Izod Impact Strength (23°C)	ASTM D256	J/m	40
Heat Deflection Temperature (455 kPa)	ASTM D648	°C	104

* Typical values, not to be taken as specification. All the mechanical properties as per ASTM D638 Type I specimen injection moulded in accordance with ASTM D4101

Applications

Plain & metallisable BOPP films

Regulatory Information

- Meets the requirements stipulated in IS 10910 on 'Specification for Polypropylene and its Copolymers for safe use in contact with foodstuff, pharmaceuticals, and drinking water'. Additives incorporated in this grade conform to the positive list of constituents as prescribed in IS 10909. The grade and the additives incorporated in it also comply with the FDA:CFR Title 21,177.1520, Olefin polymers

Storage Recommendations

- Bags should be stored in dry / closed conditions at temperatures below 50°C and protected from UV / direct sunlight

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Updated as of Jan, 2008

Technical Data Sheet

Sahara H 034 EM

Polypropylene, Homopolymer Product Description

Sahara H 034 EM is a polypropylene homopolymer used for extrusion and thermoforming applications.

Sahara H 034 EM is formulated with a low water-carry-over additive package. Typical applications are monofilaments, ropes and tapes.

Product Characteristics:

Status	:	Commercial:Active
Processing Method	:	Tapes & Raffia
Attribute	:	Homopolymer
Market	:	Textile
Application	:	Raffia / Tapes / Strapping

Typical Properties	Test Method	Nominal Value	Unit
Physical			
Melt flow rate (MFR) (230°C/2.16kg)	ISO 1133-1	3.4	g/10 min
Density	ISO 1183-1	0.900	g/cm ³
Mechanical			
Tensile Stress at Break, (23 °C, 50 mm/min)	ISO 527-1, -2	23	N/mm ²
Tensile Stress at Yield, (23 °C, 50 mm/min)	ISO 527-1, -2	34	N/mm ²
Tensile Strain at Break, (23 °C, 50 mm/min)	ISO 527-1, -2	600	%
Tensile Strain at Yield, (23 °C, 50 mm/min)	ISO 527-1, -2	11	%
Flexural modulus	ISO 178	1400	N/mm ²
Thermal			
Vicat Softening Temperature, (A50)	ISO 306	153	°C
Deflection Temperature Under Load, (0.45 MPa, Unannealed)	ISO 75B-1, -2	90	°C

Notes:

Typical properties; not to be construed as specifications.

Users should review the applicable Material Safety Data Sheet before handling the product.

Before using a product sold Sahara Marketing Company, users should make their own independent determination that the product is suitable for the intended use and can be used safely and legally. SELLER MAKES NO WARRANTY; express or implied (including any warranty of merchantability or fitness for a particular purpose or any warranty) other than as separately agreed to by the parties in a contract.

This product(s) may not be used in:

- any U.S. FDA Class I, Health Canada Class I, and/or European Union Class I medical devices, without prior notification to Seller for each specific product and application; or
- the manufacture of any of the following, without prior written approval by Seller for each specific product and application: U.S. FDA Class II Medical Devices; Health Canada Class II or Class III Medical Devices; European Union Class II Medical Devices; film, overwrap and/or product packaging that is considered a part or component of one of the aforementioned medical devices; packaging in direct contact with a pharmaceutical active ingredient and/or dosage form that is intended for inhalation, injection, intravenous, nasal, ophthalmic (eye), digestive, or topical (skin) administration; and tobacco related products and applications.

Additionally, the product(s) may not be used in:

- U.S. FDA Class III Medical Devices; Health Canada Class IV Medical Devices; European Class III Medical Devices;
- applications involving permanent implantation into the body;
- life-sustaining medical applications; and (iv) lead, asbestos or MTBE related applications. All references to U.S. FDA, Health Canada, and European Union regulations include another country's equivalent regulatory classification.

Processing Techniques:

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Health and Safety:

The resin is manufactured to the highest standards, but special requirements apply to certain applications such as food end-use contact and direct medical use. For specific information on regulatory compliance contact your local representative.

Workers should be protected from the possibility of skin or eye contact with molten polymer. Safety glasses are suggested as a minimal precaution to prevent mechanical or thermal injury to the eyes.

Molten polymer may be degraded if it is exposed to air during any of the processing and off-line operations. The products of degradation may have an unpleasant odor. In higher concentrations they may cause irritation of the mucus membranes. Fabrication areas should be ventilated to carry away fumes or vapours. Legislation on the control of emissions and pollution prevention should be observed.

The resin will burn when supplied with excess heat and oxygen. It should be handled and stored away from contact with direct flames and/or ignition sources. While burning, the resin contributes high heat and may generate a dense black smoke.

Recycled resins may have previously been used as packaging for, or may have otherwise been in contact with, hazardous goods. Converters are responsible for taking all necessary precautions to ensure that recycled resins are safe for continued use.

For further information about safety in handling and processing please refer to the Safety Data Sheet.

Conveying:

Conveying equipment should be designed to prevent production and accumulation of fines and dust particles that are contained in polymer resins. These particles can under certain conditions pose an explosion hazard. Conveying systems should be grounded, equipped with adequate filters and regularly inspected for leaks

Storage:

The resin is packed in 25 kg bags, octabins or bulk containers protecting it from contamination. If it is stored under certain conditions, i. e. if there are large fluctuations in ambient temperature and the atmospheric humidity is high, moisture may condense inside the packaging. Under these circumstances, it is recommended to dry the resin before use. Unfavorable storage conditions may also intensify the resin's slight characteristic odor.

Resin should be protected from direct sunlight, temperatures above 40°C and high atmospheric humidity during storage. Higher storage temperatures may reduce the storage time.

The information submitted is based on our current knowledge and experience. In view of the many factors that may affect processing and application, these data do not relieve processors of the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance of certain properties or of suitability for a specific purpose. This information does not remove the obligation of the customer to inspect the material on arrival and notify us of any faults immediately. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.

Compliance & Product Stewardship Department

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Disclaimer

Before using the product listed above, customers and other users should take care in determining the suitability of such product for the intended use. SIPCHEM do not accept any liability whatsoever arising from the use of this information or the use, application or processing of any product described herein.

Advanced-PP 1102K

Polypropylene Homopolymer
Advanced Petrochemical Company

PROSPECTOR®

www.ulprospector.com

Technical Data

Product Description

Advanced-PP 1102K is a propylene homopolymer for extrusion and thermoforming applications. extremely low water carry-over is a special advantage for the production of raffia tapes.

Applications

Raffia, Thermoformed parts, Tape yarns, monofilament, strapping.

Regulatory Information:

The Grade Advanced-PP 1102K and additives incorporated comply with United States FDA Regulation 21CFR 177.1520 Olefin Polymers and European Regulation (EU) 10/2011. Specific information is available upon request.

General

Material Status	• Commercial: Active	
Literature ¹	• Technical Datasheet (English)	
Availability	• Africa & Middle East	• Asia Pacific
Features	• Homopolymer	• Low Water Carryover
Uses	• Monofilaments	• Tape
	• Strapping	• Yarn
Agency Ratings	• EU 10/2011	• FDA 21 CFR 177.1520
Processing Method	• Extrusion	• Thermoforming

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.910 g/cm ³	0.910 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	3.4 g/10 min	3.4 g/10 min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	218000 psi	1500 MPa	ISO 527-2/1
Tensile Stress (Yield)	4930 psi	34.0 MPa	ISO 527-2/50
Tensile Strain			ISO 527-2/50
Yield	9.0%	9.0%	
Break	> 50%	> 50%	
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	1.9 ft·lb/in ²	4.0 kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F (23°C))	90 ft·lb/in ²	190 kJ/m ²	ISO 179/1eU
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness (H 358/30)	10700 psi	74.0 MPa	ISO 2039-1
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			ISO 75-2/B
66 psi (0.45 MPa), Unannealed	185 °F	85.0 °C	
Vicat Softening Temperature	309 °F	154 °C	ISO 306/A50
Melting Temperature (DSC)	325 °F	163 °C	ISO 3146

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

Form No. TDS-154838-en

1 of 2

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NSY114G

Characteristics and Applications:

Woven bags, woven sheets, straps etc.

Typical Properties

STT. No.	Tên chỉ tiêu/ Properties	Đơn vị/ Unit	Phương pháp/ Test methods	NSY114G Raffia
1	Chỉ số chảy Melt flowrate index	g/10 phút g/10min	ASTM D 1238	3.5
2	Tỷ trọng/ Density	g/cm ³	ASTM D1505	0.91
3	Chỉ số đẳng cấu/ Isotactic index	%	PP-F-107	98
4	Độ tan trong Xylene/ Xylene Solubility	%	ASTM D 5492	2.5
5	Độ bền kéo / Tensile yield stress	MPa	ASTM D 638	37
6	Độ giãn Elongation at break	%	ASTM D 638	>200
7	Mô-đun uốn/ Flexural modulus	MPa	ASTM D 790	1520
8	Độ bền va đập Izod ở 23°C/ Nached Izod impact strength 23°C	J/m	ASTM D 256	39
9	Độ cứng Hardness (Rockwell)	R scale	ASTM D 785	95
10	Điểm mềm hóa Vicat (10 N), Vicat Softening Temperature (10 N)	°C	ASTM D 1525	155
11	Nhiệt độ biến dạng (0.45 Mpa), Deflection temperature (0.45 Mpa)	°C	ASTM D 648	110

Note: These values are not guaranteed physical properties of future NSRP PP products, and could be changed without notice.

Polypropylene

Aramco PP HP40GK

Product Description

Aramco PP HP40GK is a homopolymer polypropylene resin and is typically used for yarn extrusion. Yarn made from this resin typically exhibits high denier strength, high anti splitting and low heat shrinkage.

Typical Applications

Woven sacks, woven cloths, monofilament, binding tape, thermoforming.

This product is not intended for use in medical and pharmaceutical applications.

Physical Properties	Unit	Test Method	Value ⁽¹⁾
Melt Flow Index (230°C/2.16kg)	g/10min	ASTM D1238	4.0
Density	g/cm ³	ASTM D792 Method A	0.9
Mechanical Properties⁽²⁾			
Tensile Strength at Yield	MPa	ASTM D638	32
Tensile Elongation at Yield	%	ASTM D638	9
Tensile Strength at Break	MPa	ASTM D638	18
Tensile Elongation at Break	%	ASTM D638	110
Flexural Modulus	MPa	ASTM D790	1300
Izod Impact, Notched 23 °C	kJ/m ²	ASTM D256	3.0
Hardness Rockwell	R scale	ASTM D785	99
Thermal Properties⁽²⁾			
Vicat Softening Temperature @10N	°C	ASTM D1525	152

(1) Typical values only, not to be construed as specification limits

(2) Test specimen preparation method : Pursuant to ASTM D4101

Processing conditions: Recommended extrusion temperature : 250 °C
 Recommended stretching temperature : 155 °C
 Recommended stretching ratio : 4 – 6

Storage and handling: Aramco PP HP40GK should be stored in a dry cool place with adequate ventilation and protected from UV-light at temperature below 50 °C

Saudi Aramco: Company General Use

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HOPELEN Y-130

PP HOMO POLYMER

General Information

Description

Y-130 is a propylene homopolymer designed for stretched products such as flat yarn
It is a low flow rate resin with a broad molecular weight distribution.
It complies with FDA regulation.

Applications

- ◆ Flat yarns for woven bags, tape and rope

Physical Properties ¹					
Physical	Test Method	Nominal Values			
Melt Flow Index	ASTM D1238	4.0	g/10min		
Density	ASTM D792	0.90	g/cm ³		
Mechanical					
Tensile Stress (Yield)	ASTM D638	350	kgf/cm ²	34	MPa
Tensile Strain (Break)	ASTM D638	>500	%		
Flexural Modulus	ASTM D790	16,000	kgf/cm ²	1,560	MPa
Rockwell Hardness	ASTM D785	103	R		
Impact					
Notched Izod Impact Strength (23 °C)	ASTM D256	4.0	kgf·cm/cm	39	J/m
Thermal					
Heat Deflection Temperature (4.6kgf/cm ²)	ASTM D648	116	°C		
VICAT Softening Point	ASTM D1525	151	°C		

NOTE

ISO 9001, 14001, /ITS 16949

¹ Physical Properties : these are not to be construed as specifications

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PP

L5E89



Material description

Specification level: PP Raffia grade

Use of the material: PP L5E89 is suggested for Raffia Tapes used in making woven fabrics for industrial packages, sacking and monofilaments applications. PP L5E89 combines good processability on water bath and chill-roll with excellent mechanical properties.

Date Sheet

Typical Characteristics		
Property	Unit	Typical Value
Melt Flow Rate(230°C/2.16kg)	g/10 min	3.5
Tensile Strength at Yield(50mm/min)	MPa	34
Elongation at Yield(50mm/min)	%	10
Flexural Modulus(1% secant)	MPa	1650
Notched Izod Impact Strength(23°C)	J/m	40
Heat Deflection Temperature(455kPa)	°C	104

PRODUCT DATA SHEET



sasol

PP PP PP PP PP PP PP PP PP PP PP PP PP PP PP PP PP															
<h2>Polypropylene Homopolymer</h2> <h1>HKR102</h1>										Technical support: Polymer Technology Services Centre 22 Pressburg Road, Modderfontein, 1609 South Africa Tel: +27 (0)11 458 0700 Fax: +27 (0)11 458 0734			Sales office: Sasol Base Chemicals PO Box 5486 Johannesburg, 2000 South Africa Tel: +27 (0)10 344 5000 E-mail: polymers@sasol.com		

Date of issue: April 2017

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MFR: 3.5 g/10min

Density: 0.905 g/cm³

Features

- Low flow
- Low water carry-over during the extrusion process
- Suitable for the injection moulding of technical articles requiring good mechanical strength

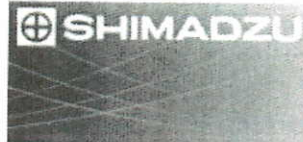
Applications

- Extrusion**
- Woven industrial fabric for high strength products
 - Flexible intermediate bulk containers (FIBC's)
 - Carpet backing
 - Sacks and bags
 - Monofilaments
 - Packaging strapping
- Injection moulding**
- Domestic, industrial and general purpose articles

Additives

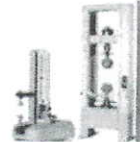
- Antioxidant
- Processing stabiliser
- Acid scavenger

Typical properties (not to be construed as specifications)		Value (SI)	Value (English)	Method
Resin Properties	Melt mass-flow rate – MFR (230/2.16)	3.5 g/10min	3.5 g/10min	ISO 1133
	Moulding Shrinkage – S_{Mp} / S_{Mn}	1.5 / 1.4 %	1.5 / 1.4 %	ISO 294-4
Physical Properties	Flexural modulus	1 550 MPa	224 810 psi	ISO 178
	Tensile modulus of elasticity	1 600 MPa	232 060 psi	ISO 527-2
	Tensile stress at yield	34.5 MPa	5 004 psi	ISO 527-2
	Tensile strain at yield	9.0 %	7.0 %	ISO 527-2
	Tensile strain at break	>50 %	>50 %	ISO 527-2
	Charpy notched impact strength (23°C)	3.5 kJ/m ²	1.7 ft-lbf/in ²	ISO 179-1
	Ball indentation hardness – HB	72 N/mm ²	10 440 psi	ISO 2039-1
Thermal Properties	Melting temperature – DSC	166°C	332°F	ISO 11357-3
	Heat deflection temperature – HDT / A (1.8 MPa)	53°C	127°F	ISO 75-2
	Heat deflection temperature – HDT / B (0.45 MPa)	85°C	185°F	ISO 75-2
	Vicat softening temperature – VST / A120 (10 N)	154°C	309°F	ISO 306



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SABIC PP 506P Polypropylene Homopolymer for Raffia Applications

Categories: [Polymer](#); [Thermoplastic](#); [Polypropylene \(PP\)](#)

Material Notes: **Product Description:** PP 506P is intended for producing low denier stretched tapes with the following features:

- Consistent processability
- Good processability at high line speeds and low deniers
- Low tapes shrinkage
- Low water carry over
- Very good mechanical properties

Typical Applications: PP 506P can be used for producing carpet backing, woven bags, cable fillers, geotextiles and concrete reinforcements.

Information provided by SABIC.

Vendors: No vendors are listed for this material. Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

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Physical Properties	Metric	English	Comments
Density	0.905 g/cc	0.0327 lb/in ³	ASTM D792
Melt Flow	4.8 g/10 min @Load 2.16 kg, Temperature 230 °C	4.8 g/10 min @Load 4.76 lb, Temperature 446 °F	ASTM D1238
Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	100	100	ASTM D785
Tensile Strength, Yield	35.0 MPa	5080 psi	ASTM D638
Elongation at Yield	12 %	12 %	ASTM D638
Flexural Modulus, 1% Secant	1500 MPa	218000 psi	ASTM D790A
Izod Impact, Notched	0.320 J/cm	0.599 ft-lb/in	ASTM D256
Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (66 psi)	100 °C	212 °F	ASTM D648
Vicat Softening Point	155 °C	311 °F	ASTM D1525B
Processing Properties	Metric	English	Comments
Processing Temperature	235 - 250 °C	455 - 482 °F	Barrel Temperature
Melt Temperature	250 - 260 °C	482 - 500 °F	

Some of the values displayed above may have been converted from their original units and/or rounded in order to display the information in a consistent format. Users requiring more precise data for scientific or engineering calculations can click on the property value to see the original value as well as raw conversions to equivalent units. We advise that you only use the original value or one of its raw conversions in your calculations to minimize rounding error. We also ask that you refer to MatWeb's [terms of use](#) regarding this information. [Click here](#) to view all the property values for this datasheet as they were originally entered into MatWeb.

Users viewing this material also viewed the following:
[SABIC PP 500P Polypropylene Homopolymer for Raffia Applications](#)
[SABIC PP 502P Polypropylene Homopolymer for Raffia Applications](#)
[SABIC PP 504P Polypropylene Homopolymer for Raffia Applications](#)
[SABIC PP 511A Polypropylene Homopolymer for Spunbond Applications](#)

SABIC[®] PP 520L

POLYPROPYLENE HOMOPOLYMER

DESCRIPTION

SABIC[®] PP 520L is specially developed for tubular water quenched blown film applications with suitable dosage of slip and antiblock additives.

Films produced using SABIC[®] PP 520L has the following features: Consistent processability; High melt strength; Good optical properties; Excellent runability on bagging and sealing machines.

TYPICAL APPLICATIONS

SABIC[®] PP 520L can be used for producing garment packaging, textiles packaging, magazine covers and for food packaging.

TYPICAL PROPERTY VALUES

Revision 20181012

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate at 230°C and 2.16kg	10	g/10 min	ASTM D1238
Density at 23°C	905	kJ/m ²	ASTM D792
FORMULATION			
Slip agent	<input checked="" type="checkbox"/>	-	-
Anti block agent	<input checked="" type="checkbox"/>	-	-
MECHANICAL PROPERTIES			
Flexural Modulus (1% Secant)	1600	MPa	ASTM D790 A
Izod Impact Strength			
notched, at 23°C	23	J/m	ASTM D256
Rockwell Hardness, R-Scale	102	-	ASTM D785
FILM PROPERTIES			
Tensile Properties ⁽¹⁾			
stress at yield	35	MPa	ASTM D638
strain at yield	10	%	ASTM D638
THERMAL PROPERTIES			
Vicat Softening Temperature	155	°C	ASTM D1525
Heat deflection temperature			
at 455kPa	105	°C	ASTM D648

(1) Based on injection molded specimens.

PROCESSING CONDITIONS

Typical processing conditions for PP520L are:

Average extrusion temperature range may be kept at 205 - 215°C.



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NSJ105G

Characteristics and Applications:

General purpose; Kitchen utensils, toys, appliance parts, etc.

Typical Properties

STT. No.	Tên chỉ tiêu/ Properties	Đơn vị/ Unit	Phương pháp/ Test methods	NSJ105G Injection
1	Chỉ số chảy Melt flowrate index	g/10 phút g/10min	ASTM D 1238	11
2	Tỷ trọng/ Density	g/cm ³	ASTM D1505	0.91
3	Chỉ số đẳng cấu/ Isotactic index	%	PP-F-107	97
4	Độ tan trong Xylene/ Xylene Solubility	%	ASTM D 5492	3.5
5	Độ bền kéo / Tensile yield stress	MPa	ASTM D 638	37
6	Độ giãn Elongation at break	%	ASTM D 638	>200
7	Mô-đun uốn/ Flexural modulus	MPa	ASTM D 790	1570
8	Độ bền va đập Izod ở 23°C/ Noched Izod impact strength 23°C	J/m	ASTM D 256	29
9	Độ cứng Hardness (Rockwell)	R scale	ASTM D 785	100
10	Điểm mềm hóa Vicat (10 N), Vicat Softening Temperature (10 N)	°C	ASTM D 1525	155
11	Nhiệt độ biến dạng (0.45 Mpa), Deflection temperature (0.45 Mpa)	°C	ASTM D 648	115

Note: These values are not guaranteed physical properties of future NSRP PP products, and could be changed without notice.



HI 10MA

HOMOPOLYMER FOR INJECTION MOULDED PRODUCTS

Repol HI 10MA is recommended for **Injection Moulding** processes. Repol HI 10MA is an ideal choice for moulding rigid containers, thermowares and housewares. It is also suitable as a compounding base and blending material in furniture compound. Repol HI 10MA contains antistat agent that reduces static charge build-up in products.

Typical Characteristics			
Property	Test Method	Unit	Typical Value*
Melt Flow Rate (230°C/2.16 kg)	ASTM D1238	g/10 min	11
Tensile Strength at Yield (50 mm/min)	ASTM D638	MPa	36
Elongation at Yield (50 mm/min)	ASTM D638	%	10
Flexural Modulus (1% secant)	ASTM D790A	MPa	1650
Notched Izod Impact Strength (23°C)	ASTM D256	J/m	27
Heat Deflection Temperature (455 kPa)	ASTM D648	°C	104

* Typical values, not to be taken as specification. All the mechanical properties as per ASTM D638 Type I specimen injection moulded in accordance with ASTM D4101

Applications

Rigid packaging, furniture & houseware

Regulatory Information

- Meets the requirements stipulated in IS 10910 on 'Specification for Polypropylene and its Copolymers for safe use in contact with foodstuff, pharmaceuticals, and drinking water'. Additives incorporated in this grade conform to the positive list of constituents as prescribed in IS 10909. The grade and the additives incorporated in it also comply with the FDA:CFR Title 21,177.1520, Olefin polymers

Storage Recommendations

- Bags should be stored in dry / closed conditions at temperatures below 50°C and protected from UV / direct sunlight

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Updated as of Jan, 2008

BSR™ I3110

Polypropylene Homopolymer

BinhSon Refining & Petrochemical Co.,Ltd



General

Material Status	. Comercial: Active
Availability	. Asia Pacific
Features	. High Flow . Homolymer
Uses	. Closures . General Purpose . Food Containers . Household Goods
Forms	. Pellets
Processing Method	. Injection Molding

Physical	Nominal Value Unit	Test Method
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Density	0.91 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (230°C/2.16kg)	11 g/10min	ASTM D1238

Hardness	Nominal Value Unit	Test Method
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Rockwell Hardness (R-Scale)	100	ASTM D785
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Mechanical	Nominal Value Unit	Test Method
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Tensile Strength		ASTM D638
Yield	38 MPa	
Break	24.5 MPa	
Flexural Modulus	1600 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
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Notched Izod Impact (23°C)	24 J/m	ASTM D256
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Thermal	Nominal Value Unit	Test Method
---------	--------------------	-------------

Deflection Temperature under load 0.45 Mpa	98 °C	ASTM D1525
Viscat softening point 66psi	157 °C	ASTM D648

Notes

¹ Typical properties: these are not to be construed as specifications.



HI 10MA

HOMOPOLYMER FOR INJECTION MOULDED PRODUCTS

Repol HI 10MA is recommended for **Injection Moulding** processes. Repol HI 10MA is an ideal choice for moulding rigid containers, thermowares and housewares. It is also suitable as a compounding base and blending material in furniture compound. Repol HI 10MA contains antistat agent that reduces static charge build-up in products.

Typical Characteristics			
Property	Test Method	Unit	Typical Value*
Melt Flow Rate (230°C/2.16 kg)	ASTM D1238	g/10 min	11
Tensile Strength at Yield (50 mm/min)	ASTM D638	MPa	36
Elongation at Yield (50 mm/min)	ASTM D638	%	10
Flexural Modulus (1% secant)	ASTM D790A	MPa	1650
Notched Izod Impact Strength (23°C)	ASTM D256	J/m	27
Heat Deflection Temperature (455 kPa)	ASTM D648	°C	104

* Typical values, not to be taken as specification. All the mechanical properties as per ASTM D638 Type I specimen injection moulded in accordance with ASTM D4101

Applications

Rigid packaging, furniture & houseware

Regulatory Information

- Meets the requirements stipulated in IS 10910 on 'Specification for Polypropylene and its Copolymers for safe use in contact with foodstuff, pharmaceuticals, and drinking water'. Additives incorporated in this grade conform to the positive list of constituents as prescribed in IS 10909. The grade and the additives incorporated in it also comply with the FDA:CFR Title 21,177.1520, Olefin polymers

Storage Recommendations

- Bags should be stored in dry / closed conditions at temperatures below 50°C and protected from UV / direct sunlight

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Updated as of Jan, 2008

HOPELEN H4540

PP HOMO POLYMER

General Information

Description

H4540 is the polypropylene homopolymer manufactured by the Spheripol process. This grade is designed to potential end use applications include high slip

Applications

Clothes packaging, food packaging

Physical Properties¹

Physical	Test Method	Nominal Values			
Melt Flow Index	ISO 1133	12	g/10min		
Density	ISO 1183	0.90	g/cm ³		
Mechanical					
Tensile Stress (Yield)	ISO 527-1	330	kgf/cm ²	32	MPa
Tensile Strain (Break)	ISO 527-1	>500	%	>500	%
Flexural Modulus	ISO 178	15,500	kgf/cm ²	1,520	MPa
Other Properties					
Notched Izod Impact Strength (23℃)	ISO 180	4.3	kgf-cm/cm	41	J/m
Rockwell Hardness	ISO 180	100			
Thermal					
Melting Point		162	℃		
Heat Deflection Temperature	ISO 306	80	℃		

* Measured on 30 μ m CPP film made of H4540

NOTE

ISO 9001, 14001, ITS 16949

¹ Physical Properties : these are not to be construed as specifications

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PRODUCT DATA SHEET



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PP PP PP PP PP PP PP PP PP PP PP PP PP PP PP PP															
<p>Polypropylene Homopolymer</p> <p>HNR100</p>					<p>Technical support: Polymer Technology Services Centre 22 Pressburg Road, Modderfontein, 1609 South Africa</p> <p>Tel: +27 (0)11 458 0700 Fax: +27 (0)11 458 0734</p>					<p>Sales office: Sasol Base Chemicals PO Box 5486 Johannesburg, 2000 South Africa</p> <p>Tel: +27 (0)10 344 5000 E-mail: polymers@sasol.com</p>					

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MFR: 12 g/10min

Density: 0.905 g/cm³

Features

- High flow
- Suitable for general injection moulded products where rigidity and shorter cycle times are required

Applications

- Injection moulding
- Caps and closures
 - Household and domestic articles
 - Cosmetic and toiletry components
 - Outdoor furniture

Additives

- Antioxidant
- Processing stabiliser
- Acid scavenger

Typical properties (not to be construed as specifications)		Value (SI)	Value (English)	Method
Resin Properties	Melt mass-flow rate – MFR (230/2.16)	12 g/10min	12 g/10min	ISO 1133
	Moulding Shrinkage – S_{Mp} / S_{Mn}	1.4 / 1.3 %	1.4 / 1.3 %	ISO 294-4
Physical Properties	Flexural modulus	1 500 MPa	217 560 psi	ISO 178
	Tensile modulus of elasticity	1 550 MPa	224 810 psi	ISO 527-2
	Tensile stress at yield	34 MPa	4 930 psi	ISO 527-2
	Tensile strain at yield	8.5 %	8.5 %	ISO 527-2
	Tensile strain at break	>50 %	>50 %	ISO 527-2
	Charpy notched impact strength (23°C)	2.8 kJ/m ²	1.4 ft-lbf/in ²	ISO 179-1
	Ball indentation hardness – HB	70 N/mm ²	10 150 psi	ISO 2039-1
Thermal Properties	Melting temperature – DSC	168°C	334°F	ISO 11357-3
	Heat deflection temperature – HDT / A (1.8 MPa)	53°C	127°F	ISO 75-2
	Heat deflection temperature – HDT / B (0.45 MPa)	85°C	185°F	ISO 75-2
	Vicat softening temperature – VST / A120 (10 N)	154°C	309°F	ISO 306

HOPELEN H4540

PP HOMO POLYMER

General Information

Description

H4540 is the polypropylene homopolymer manufactured by the Spheripol process. This grade is designed to potential end use applications include high slip

Applications

Clothes packaging, food packaging

Physical Properties ¹					
Physical	Test Method	Nominal Values			
Melt Flow Index	ISO 1133	12	g/10min		
Density	ISO 1183	0.90	g/cm ³		
Mechanical					
Tensile Stress (Yield)	ISO 527-1	330	kgf/cm ²	32	MPa
Tensile Strain (Break)	ISO 527-1	>500	%	>500	%
Flexural Modulus	ISO 178	15,500	kgf/cm ²	1,520	MPa
Other Properties					
Notched Izod Impact Strength (23℃)	ISO 180	4.3	kgf·cm/cm	41	J/m
Rockwell Hardness	ISO 180	100			
Thermal					
Melting Point		162	℃		
Heat Deflection Temperature	ISO 306	80	℃		

* Measured on 30 μ m CPP film made of H4540

NOTE

ISO 9001, 14001, /TS 16949

¹ Physical Properties : these are not to be construed as specifications

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NSJ106G

Characteristics and Applications:

General purpose; house wares, appliance etc.

Typical Properties

STT. No.	Tên chỉ tiêu/ Properties	Đơn vị/ Unit	Phương pháp/ Test methods	NSJ106G Injection
1	Chỉ số chảy Melt flowrate index	g/10 phút g/10min	ASTM D 1238	15
2	Tỷ trọng/ Density	g/cm ³	ASTM D1505	0.91
3	Chỉ số đẳng cấu/ Isotactic index	%	PP-F-107	97
4	Độ tan trong Xylene/ Xylene Solubility	%	ASTM D 5492	3.5
5	Độ bền kéo / Tensile yield stress	MPa	ASTM D 638	36
6	Độ giãn Elongation at break	%	ASTM D 638	>200
7	Mô-đun uốn/ Flexural modulus	MPa	ASTM D 790	1570
8	Độ bền va đập Izod ở 23°C/ Noched Izod impact strength 23°C	J/m	ASTM D 256	29
9	Độ cứng Hardness (Rockwell)	R scale	ASTM D 785	100
10	Điểm mềm hóa Vicat (10 N), Vicat Softening Temperature (10 N)	°C	ASTM D 1525	155
11	Nhiệt độ biến dạng (0.45 Mpa), Deflection temperature (0.45 Mpa)	°C	ASTM D 648	110

Note: These values are not guaranteed physical properties of future NSRP PP products, and could be changed without notice.

PRODUCT DATA SHEET



PP PP PP PP PP PP PP PP PP PP PP PP PP PP PP PP PP																	
<p>Polypropylene Homopolymer</p> <p>HRV140</p>										<p>Technical support: Polymer Technology Services Centre 22 Pressburg Road, Modderfontein, 1609 South Africa</p> <p>Tel: +27 (0)11 458 0700 Fax: +27 (0)11 458 0734</p>				<p>Sales office: Sasol Base Chemicals PO Box 5486 Johannesburg, 2000 South Africa</p> <p>Tel: +27 (0)10 344 5000 E-mail: polymers@sasol.com</p>			

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MFR: 20 g/10min

Density: 0.905 g/cm³

Features

- High flow
- Narrow molecular weight distribution
- Suitable for injection moulded products where rigidity and shorter cycle times are required
- Contains a nucleating agent which ensures rapid crystallisation, resulting in an improved impact to stiffness balance as well as shorter cooling times
- The grade is produced to a wider than normal product specification

Applications

- Injection moulding
- Caps and closures
 - Household and domestic articles
 - Cosmetic and toiletry components

Additives

- Antioxidant
- Processing stabiliser
- Acid scavenger
- Nucleation

Typical properties (not to be construed as specifications)		Value (SI)	Value (English)	Method
Resin Properties	Melt mass-flow rate – MFR (230/2.16)	20 g/10min	20 g/10min	ISO 1133
	Moulding Shrinkage – S_{Mp} / S_{Mn}	1.3 / 1.3 %	1.3 / 1.3 %	ISO 294-4
Physical Properties	Flexural modulus	1 550 MPa	224 810 psi	ISO 178
	Tensile modulus of elasticity	1 600 MPa	232 060 psi	ISO 527-2
	Tensile stress at yield	34 MPa	4 930 psi	ISO 527-2
	Tensile strain at yield	8.0 %	8.0 %	ISO 527-2
	Tensile strain at break	>50 %	>50 %	ISO 527-2
	Charpy notched impact strength (23°C)	3.0 kJ/m ²	1.5 ft·lbf/in ²	ISO 179-1
	Ball indentation hardness – HB	73 N/mm ²	10 590 psi	ISO 2039-1
Thermal Properties	Melting temperature – DSC	166°C	330°F	ISO 11357-3
	Heat deflection temperature – HDT / A (1.8 MPa)	52°C	125°F	ISO 75-2
	Heat deflection temperature – HDT / B (0.45 MPa)	84°C	183°F	ISO 75-2
	Vicat softening temperature – VST / A120 (10 N)	153°C	307°F	ISO 306

SABIC[®] PP 512A

POLYPROPYLENE HOMOPOLYMER

DESCRIPTION

SABIC[®] PP 512A is a controlled rheology grade with narrow molecular weight distribution intended for general purpose applications such as woven sacks lamination and injection molding.

SABIC[®] PP 512A has the following features: Consistent processability; Good thread line stability; Good color consistency; Good gas fading resistance.

TYPICAL APPLICATIONS

SABIC[®] PP512A can be used for woven sacks lamination, woven fabric coating and household articles.

Revision 20181012

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate			
at 230°C and 2.16kg	25	g/10 min	ASTM D1238
Density			
at 23°C	905	kg/m ³	ASTM D792
MECHANICAL PROPERTIES			
Flexural Modulus (1% Secant)	1520	MPa	ASTM D790 A
Izod Impact Strength			
notched, at 23°C	22	J/m	ASTM D256
Rockwell Hardness, R-Scale	104	-	ASTM D785
FILM PROPERTIES			
Tensile Properties ⁽¹⁾			
stress at yield	35	MPa	ASTM D638
strain at yield	11	%	ASTM D638
THERMAL PROPERTIES			
Vicat Softening Temperature	155	°C	ASTM D1525
Heat deflection temperature			
at 455kPa	106	°C	ASTM D648

(1) Based on injection molded specimens.

PROCESSING CONDITIONS

Typical processing conditions for 512A are:

Average extrusion temperature range may be kept at 210 - 250°C.

Lower processing temperatures are possible with this material and will result in better long term heat aging.

HEALTH, SAFETY AND FOOD CONTACT REGULATIONS

Material Safety Data Sheets (MSDS) and Product Safety declarations are available on our Internet site <http://www.SABIC.com>. For additional specific information please contact SABIC local representative.

DISCLAIMER: This product is not intended for and must not be used in any pharmaceutical / medical applications.



H200MA

HOMOPOLYMER FOR INJECTION MOULDED PRODUCTS

Repol H200MA is recommended for use in **Injection Moulding** processes. It is an ideal material to use in moulding articles with intricate, long flow paths and multicavity moulding. Repol H200MA contains antistatic agent that reduces static charge build-up in products.

Typical Characteristics			
Property	Test Method	Unit	Typical Value*
Melt Flow Rate (230°C/2.16 kg)	ASTM D1238	g/10 min	25
Tensile Strength at Yield (50 mm/min)	ASTM D638	MPa	32
Elongation at Yield (50 mm/min)	ASTM D638	%	11
Flexural Modulus (1% secant)	ASTM D790A	MPa	1650
Notched Izod Impact Strength (23°C)	ASTM D256	J/m	27
Heat Deflection Temperature (455 kPa)	ASTM D648	°C	104

* Typical values, not to be taken as specification. All the mechanical properties as per ASTM D638 Type I specimen injection moulded in accordance with ASTM D4101

Applications

Thin wall containers, multicavity moulding

Regulatory Information

- Meets the requirements stipulated in IS 10910 on 'Specification for Polypropylene and its Copolymers for safe use in contact with foodstuff, pharmaceuticals, and drinking water'. Additives incorporated in this grade conform to the positive list of constituents as prescribed in IS 10909. The grade and the additives incorporated in it also comply with the FDA:CFR Title 21,177.1520, Olefin polymers.

Storage Recommendations

- Bags should be stored in dry / closed conditions at temperatures below 50°C and protected from UV / direct sunlight

Reliance Industries Limited, Product - Application & Technology Group, PRTC,
Swastik Mill Compound, V. N. Purav Marg, Chembur, Mumbai-400 071. Tel.: +91-22-6767 7000. E-mail: polymer_patsupport@ril.com Website: www.ril.com

• The information and data presented herein is true and accurate to the best of our knowledge. No warranty or guarantee expressed or implied, is made regarding performance or otherwise. This information and data may not be considered as a suggestion to use our products without taking into account existing patents, or legal provisions or regulations, whether national or international. • The user of any information and/or data is advised to obtain the latest details from any of the offices of the company or its authorised agents, as the information and/or data is subject to change based on the research and development work undertaken by the company.

Updated as of Nov, 2008

HOPELEN SJ-170

PP HOMOPOLYMER

General Information

● Description

SJ-170 is homo polymer resin produced through the polymerization of propylene. This grade is designed to be processed in conventional Injection molding equipment. SJ-170 shows good thermal stability and high melt-flow. It is typically used in production of housewares and the general supplies.

● Applications

◆Housewares and general supplies

Physical Properties¹

Physical	Test Method	Nominal Values			
Melt Flow Index	ASTM D1238	25	g/10min		
Density	ASTM D792	0.90	g/cm ³		
Mechanical					
Tensile Stress (Yield)	ASTM D638	350	kgf/cm ²	34	MPa
Tensile Strain (Break)	ASTM D638	<100	%	<100	%
Flexural Modulus	ASTM D790	16,000	kgf/cm ²	1,570	MPa
Impact					
Notched Izod Impact Strength (23℃)	ASTM D256	2.5	kgf-cm/cm	25	J/m
Notched Izod Impact Strength (-10℃)	ASTM D256	2.0	kgf-cm/cm	20	J/m
Thermal					
Heat Deflection Temperature (4.6kgf/cm ²)	ASTM D648	105	℃		

NOTE

ISO 9001, 14001, ITS 16949

¹ Physical Properties : these are not to be construed as specifications

www.lottechem.com

POLYPROPYLENE

TASNEE PP H2250

DESCRIPTION

TASNEE PP H2250 is a Polypropylene Homopolymer with a Melt Flow Rate (MFR) of 25 g/10min. TASNEE PP H2250 is a medium narrow molecular weight distribution with anti-gas fading stabilization. It is intended for the extrusion of fine fibers with the spunbond technology for non-woven applications. It is also suitable for the extrusion of bulk continuous filament (BCF) for carpet pile and continuous filament (CF) yarns.

TYPICAL APPLICATIONS

TASNEE PP H2250 is used for Spunbond non-woven applications and also suitable for BCF/CF yarns. It is also utilized for coating applications as well as general purpose injection molding grade for thin wall applications.

TYPICAL PROPERTIES

Physical	Method	Unit	Value
Melt Flow Rate (230°C/2.16 kg)	ISO 1133	g/10min	25
Melting Temperature	ISO 11357-3	°C	163
Vicat Softening Temperature	ISO 306	°C	152
Heat Distortion Temperature @ 0.45 MPa	ISO 75-2	°C	102
Density	ISO 1183	g/cm ³	0.9
Mechanical	Method	Unit	Value
Tensile Strength @ Yield	ISO 527-2	MPa	33
Tensile Elongation @ Yield	ISO 527-2	%	10
Flexural Modulus (1% Secant)	ISO 178	MPa	1450
Charpy Impact Strength (Notched) at 23° C	ISO 179/1eA	KJ/m ²	3.0
Rockwell Hardness	ISO 2039-2	R	95
BCF Processing Conditions			
Extrusion Temperatures	210 ~ 240° C		
Rolls Temperature	80 ~ 120° C		
Draw Ratio	2.8 ~ 3.3		
Quenching Temperature	10 ~ 20° C		
Texturising Temperature	150 ~ 170° C		

NOTE Processing parameters should only be used as guidelines. The above properties values are not to be construed as specifications.

POLYPROPYLENE

TASNEE PP H2250

FOOD CONTACT

The material is manufactured to the highest standards but, special requirements apply to certain applications, such as food contact end-use. For specific information on regulatory compliance, please contact TASNEE below or our local representative in your area.

SAFETY

Workers should be protected from the possibility of skin or eye contact with molten polymer. As minimum precaution, safety glasses and heat resistance gloves are suggested to prevent mechanical or thermal injury to eyes and hands. Molten polymer exceeding processing condition requirements may degrade and release, fumes, vapors and unpleasant odor. In higher concentrations they may cause irritation of the mucus membranes. Fabrication areas should be ventilated to carry away fumes and vapors. Legislation on the control of emissions and pollution prevention must be observed. If the principles of sound manufacturing practice are adhered to and the place of work is well ventilated, no health hazards are involved in processing the material. The material may burn when supplied with excess heat and oxygen. It should be handled and stored away from contact with direct flames and/or ignition sources. In burning the material generates considerable heat and may release a dense black smoke. Fires should be extinguished by heavy foams or dry powder. For further information about safety in handling and processing please refer to the Material Safety Data Sheet (MSDS).

STORAGE

The material is packed in 25 kg bags or in bulk containers protecting it from contamination. Storage time of material longer than 6 months may have a negative influence on the quality of the final product. It is generally recommended to convert all materials latest within 6 months from delivery date. The material is subjected to degradation by ultra-violet radiation or by high storage temperatures. Therefore the material must be protected from direct sunlight, temperatures above 40°C and high atmospheric humidity during storage. Further unfavorable storage conditions are large fluctuations in ambient temperature and high atmospheric humidity. TASNEE will not give any warranty to unfavorable storage conditions which may lead to quality deterioration such as color change, bad smell and inferior product performance.

DISCLAIMER

"The information and data contained in this publication is submitted without prejudice, and is based on our current knowledge, experience and on a limited number of tests". "In view of the many factors that may affect processing and application, these data do not relieve the receiver of this information from the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance of certain properties nor of suitability for a specific purpose of the products made with or on the basis of the information in this publication".

TASNEE MARKETING

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SABIC® PP 511A

POLYPROPYLENE HOMOPOLYMER
REGION ASIA

DESCRIPTION

SABIC® PP 511A is a polypropylene homopolymer resin specifically designed for extrusion applications like spun bond and continuous filament spinning resulting in excellent non woven tensile properties. The narrow molecular weight distribution of SABIC® PP 511A is obtained by balanced controlled rheology. SABIC® PP 511A is compatible with all existing spun bond/continuous filament machine technologies producing different non woven compositions, produced with narrow distributed molecular weight polypropylene resins. SABIC® PP 511A has a special developed anti gas fading formulation to minimise discolouration of the fibers.

TYPICAL APPLICATIONS

SABIC® PP 511A is typically used for the production of non wovens and fibres used in: Diapers, feminine care, crop/flower protection, concrete reinforcement, protective clothing, ground stabilisation in civil applications like road and railway construction work, liners in automotive, apparel clothing and flooring.

TYPICAL PROPERTY VALUES

Revision 20170706

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate			
at 230°C and 2.16kg	25	g/10 min	ASTM D1238
Density			
at 23°C	905	kg/m ³	ASTM D792
MECHANICAL PROPERTIES			
Flexural Modulus (1% Secant)			
	1520	MPa	ASTM D790 A
Izod Impact Strength			
notched, at 23°C	22	J/m	ASTM D256
Rockwell Hardness, R-Scale			
	104	-	ASTM D785
FILM PROPERTIES			
Tensile Properties ⁽¹⁾			
stress at yield	35	MPa	ASTM D638
strain at yield	11	%	ASTM D638
THERMAL PROPERTIES			
Vicat Softening Temperature			
	155	°C	ASTM D1525
Heat deflection temperature			
at 455kPa	106	°C	ASTM D638



(1) Based on injection molded specimens.

PROCESSING CONDITIONS

Typical processing conditions for 511A are:

Average extrusion temperature range may be kept at 210 - 250°C.

HEALTH, SAFETY AND FOOD CONTACT REGULATIONS

SABIC® PP 511A is suitable for food contact application. Material Safety Data Sheets (MSDS) and Product Safety Declarations are available on our Internet site <http://www.SABIC.com>. For additional specific information please contact SABIC local representative.

The product mentioned herein is in particular not tested and therefore not validated for use in pharmaceutical/ medical applications.

This grade material is UL registered under File E111275 (www.ul.com).

IMDS 7172624

STORAGE AND HANDLING

Polypropylene resin should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably do not exceed 50°C. SABIC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PP resin within 6 months after delivery.

DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.

Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

SABIC as referred to herein means any legal entity belonging to the group of companies headed by Saudi Arabia Basic Industries Corporation.

台塑聚丙烯塑膠 FORMOSA POLYPROPYLENE



Formosa Plastics Corporation

永嘉烯 YUNGSOX

1352F

均聚物 *HOMOPOLYMER*

用途 Applications

- 不織布 Non-woven fabric
- 濾布 Filter cloth
- 工業布 Industrial textile

特性 Characteristics

- 抗氣體變色性佳 Anti gas-fading
- 延伸性佳 Good stretchability
- 柔軟性佳 Good softness

物性 Typical Properties

項目 Properties	單位 Unit	檢驗方法 Test Method	平均值 Typical Value
熔融指數 Melt Index	g/10min	ISO1133	35
密度 Density	g/cm ³	ISO1183	0.90
熔點 Melting Point	°C	DSC	---
熱變形溫度 Heat Deflection Temperature	°C	ISO75	115
軟化點溫度 Vicat Softening Temperature	°C	ISO306	152
降伏點拉力強度 Tensile Strength at Yield	Kg/cm ²	ISO527	300
斷裂點伸長率 Tensile Elongation at Break	%	ISO527	100
洛氏硬度 Rockwell Hardness	R scale	ISO2039	105
剛性係數 Flexural Modulus	Kg/cm ²	ISO178	13,000
IZOD衝擊強度 IZOD Impact Strength	Kg.cm/cm notch	ISO 180	23°C -20°C 4 ---
收縮率 Mold Shrinkage	%	FPC Method	1.3-1.7

本表數據為代表值，僅供選擇品級用途之參考

The details given in this data sheet are our standard value but not specification guaranteed.

FDA認可 FDA Approval

永嘉烯 1352F符合美國食品及藥物管理局 21 CFR 177.1520之規範，可直接與食物接觸。

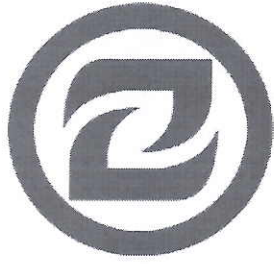
Yungsox 1352F resin meets the FDA requirements in the Code of Federal Regulations in 21 CFR 177.1520 for food contact.

July 2008

技術服務 Client service

電話 TEL: 886-7-6419911 ext. 313

傳真 FAX: 886-7-6425581



中景石化

ZHONGJING PETROCHEMICAL

POLYPROPYLENE H30S SPECIFICATION

GRADE

Fiber spinning grade

APPLICATIONS

- 1 Non-woven fabrics
- 2 Wrapping rope

CHARACTERISTICS

With good mechanical resistance and high temperature resistance

PROPERTIES

ITEM		UNIT		VALUE	METHOD
1	Appearance	Black	piece/kg	≤ 0	SH/T 1541
2	MFR		g/10min	35.0±3	GB/T 3682
3	Isotactic index		%	≥ 95.0	GB/T 2412
4	Ash Content		%	≤ 0.02	GB/T 9345.1
5	Elongation		%	≥ 10	GB/T 1040.2
6	Tensile Strength at Yield		Mpa	≥ 35.0	
7	Vicat softening point		kJ/m ²	≥ 2.8	GB/T 1043.1

The figures listed in this guide are for reference purposes only; they are not to be used as specification limits.

Please note that this information provided herein might be updated without a previous notice.

For further requirements, please contact us.



张家港扬子江石化有限公司
Zhangjiagang Yangzijiang PetroChemical Company Limited

PP Textiles-spunbond product—Y381H

Summarize

Y381H is a polypropylene homopolymer for Textiles-spunbond.

Key characteristics

-high speed

Main Application

-Textiles-spunbond

Typical properties

properties	Typical value	Unit	Test method
MFR(2.16kg, 230°C)	38.0	g/10min	ASTM D1238
Tensile Strength at yield	30	MPa	ASTM D638
Tensile Elongation at yield	8	%	ASTM D638
Flexual Modulus	1175	MPa	ASTM D790A
Notchdc Izod Impact at 23°C	24	J/m	ASTM D256
Yellow Index	0	%	ASTM D1925-63T
HDT at 0.45MPa	104	°C	ASTM D648

Notes: Values given are typical and should not be interpreted as specification.

Storage:

Product should be stored in a dry and dust free environment at temperatures below 50°C.

Exposure to direct sunlight should be avoided, as this may lead to product deterioration.

Environmental Issues:

Our product can be recycled, incinerated or disposed of in landfill without detriment to the environment in accordance with local or national regulations.

With recycling, clean waste can be re-used for many less demanding applications.

Alternatively, with properly controlled and efficient incineration, preferably linked to heat or other energy recovery systems, polypropylene's high calorific value will assist the combustion of municipal solid waste.

In landfill sites, the product does not degrade to produce voids, and does not emit dangerous gases or contribute to ground water pollution.

地址：江苏省南京市仙林大道徐庄软件园紫气路1号 邮编：210042
电话：02586771112 传真：025-86771065 Email: @chinadhe.com

Homo PP HX3800

YUPLENE HX3800 is a high crystalline polypropylene homopolymer designed for injection molding applications. YUPLENE HX3800 has excellent properties in stiffness, flow, heat resistance and good dimensional stability. YUPLENE HX3800 can be used for auto parts, household articles, electric appliances and various containers. YUPLENE HX3800 can reduce various injection problems such as surface trouble, shrink, warpage etc. and reduce the cycle time of injection molding due to rapid crystallization.

YUPLENE HX3800 complies with FDA regulation 21 CFR177.1520.

Application / Use Case

Injection Molding / Automobile applications, Home appliances, Industrial parts for electronic

Physical Properties

	Value	Unit	Test Method
Melt Index	45.0	g/10min	ASTM D1238
Softening Point (Vicat)	156	°C	ASTM D1525
Tensile Strength at Yield	420	kg/cm ²	ASTM D638
Elongation at Break	<300	%	ASTM D638
IZOD Impact Strength (Notched, 23°C)	2.5	kg·cm/cm	ASTM D256
Flexural Modulus	21000	kg/cm ²	ASTM D790
Hardness(Rockwell)	107	R Scale	ASTM D785
Heat Distortion Temperature	140	°C	ASTM D648

These are typical properties only, and are not to be construed as specific limits.

PP > JM-380

JM-380

> INQUIRY

MAJOR CHARACTERISTICS

- * High Flow
- * High impact strength (FM)
- * Good stiffness

APPLICATION

- * High quality houseware
- * High quality houseware
- * Home electric goods Case

PROPERTIES DATA SHEET

Properties	Test Method	Unit	JM-380
Melt Flow Rate (MFR) 230°C	ASTM D-1238	g/10min	58.0
Mold Shrinkage	HPC Method	%	1.50
Density2	ASTM D-1505	g/cm ³	260
Tensile Strength at Yield	ASTM D-638	Kg/cm ²	> 100
Ultimate Elongation	ASTM D-638	%	14.500
Flexural Modulus of Elasticity	ASTM D-790	<	

恒力石化（大连）炼化有限公司
Hengli petrochemical(Dalian)Refinery Co.,Ltd
产品质量合格证

Certificate of analysis

产品名称：聚丙烯树脂
产品牌号：PPH-T035 (L5E89)
产品批号：20190528D-8110
采样地点：D-8110
留样编号：260812
执行标准：GB/T 12670-2008
签发日期：2019-05-30 08:13
记录编号 R/HLJY-CR-001

Product name: polypropylene resin
Product brand: PPH-T035 (L5E89)
Batch number: 20190528D-8110
Sampling location: D-8110
Sample number: 260812
Standard: GB/T 12670-2008
Date of issue: 2019-05-30 08:13
Record number R/ HLJY-CR-001

分析项目	质量指标	检测结果	试验方法
颗粒外观： 黑粒, 个/kg 大粒和小粒, g/10min	0 实测	0 3	SH/T1541-2006
熔体质量流动速 率, g/10min	2.45~4.55	3.40	GB/T3682-2000
等规指数, %	94.7~98.7	98.2	GB/T2412-2008
灰分（质量分数）, %	实测	0.0260	GB/T9345.1-2008
拉伸性能： 拉伸屈服应力, MPa 拉伸断裂应力, MPa 拉伸断裂标称应变, %	>29.0 >15 >150	33.5 21.9 786	GB/T1040.2-2006

Test item	Quality index	Result	Test method
Appearance: Black grain, quantity/kg Big grains and small grains, g/10min	0 Measurement	0 3	SH/T1541-2006
MFI, g/10min	2.45~4.55	3.40	GB/T3682-2000
isotactic index, %	94.7~98.7	98.2	GB/T2412-2008
Ash (mass fraction) , %	Measurement	0.0260	GB/T9345.1-2008
Tensile property: Tensile yield stress, MPa Tensile fracture stress, MPa Tensile fracture nominal strain, %	>29.0 >15 >150	33.5 21.9 786	GB/T1040.2-2006

主要产品牌号性能指标典型值（非保证值）及用途

Grades, Typical Values (Not Warranted Values) and Applications

产品牌号 Grades		Y2600T	Y1600	Y3700C	S700	YS835
熔体流动速率 MFR	g/10min	26	16	37	14	34
拉伸屈服强度 Tensile Strength at yield	MPa	32.0	31.4	30.0	31	31
弯曲模量 Flexural Modulus	GPa	1.3	1.3	0.82	1.2	—
等规指数 Isotactic Index	%	96	96	94.5	96	96
灰分 Ash	%	0.03	0.02	0.04	0.05	0.015
主要用途 Applications		烟用丝束 Filter Tows	长、短纤维 Long and Short Fibers	超细旦纤维 Ultra-fine Staple Fibers	纺丝 Spinning	纺丝 Spinning
产品认证 Certifications		食品卫生	—	食品卫生/FDA/ ROHS	食品卫生/ROHS	—
生产企业 Manufacturers		上海 Shanghai	上海 Shanghai	上海 Shanghai	扬子 Yangzi	洛阳 Luoyang

产品牌号 Grades		YS830	H30S	Z30S	CS820	Z30S
熔体流动速率 MFR	g/10min	29	35	25	23	25
拉伸屈服强度 Tensile Strength at yield	MPa	29	28.4	28.4	28	30
等规指数 Isotactic index	%	96	94	94	96	94
灰分 Ash	%	0.03	0.035	0.035	0.03	0.02
主要用途 Applications		纺丝 Spinning	超细旦纤维 Ultra-fine Staple Fibers	高速纺丝、BCF 膨体纱 Ultra-fine Staple Fibers, BCF Filament	纤维、长丝、无 纺布 Fibers, Filaments, Non-woven Clothing	高速纺丝、BCF 膨体纱 Ultra-fine Staple Fibers, BCF Filament
产品认证 Certifications		—	—	—	FDA/ROHS	FDA/ROHS
生产企业 Manufacturers		洛阳 Luoyang	济南 Ji'nan	济南 Ji'nan	广州 Guangzhou	茂名 Maoming

纤维料

Fiber Grade

产品简介

中国石化是国内聚丙烯纤维料最大的供应商，产品具有灰分低、可纺性好等特点。

Overview

Sinopec is the largest PP fiber grade supplier in China. PP fiber grade by Sinopec is characterized by low ash content and good spinning properties.

产品用途

聚丙烯纤维料产品广泛用于高速和超高速纺丝、粘胶无纺布等生产领域，用于生产膨体连续长丝 (BCF)、细旦超细旦纤维、烟用丝束和超细无纺布等产品，其产品在装饰、医疗卫生材料、服装三大领域中具有广泛的用途。

Applications

PP fiber grade is widely used in the production of bulked continuous filament (BCF), fine and superfine staple fiber, cigarette filter tow and superfine non-woven fabric in high-speed and ultrahigh-speed spinning and spunbonded non-woven fabric production. It has a variety of applications in the decoration, medical sanitation martial and clothing production sectors.

产品包装及贮运要求

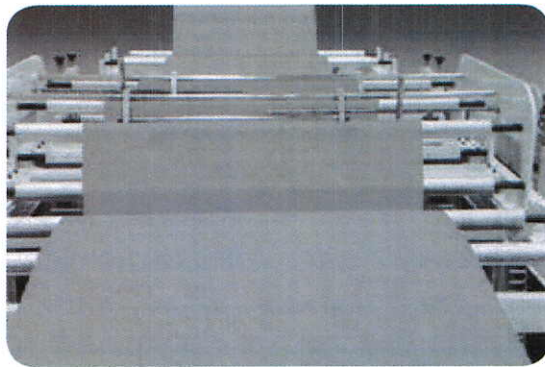
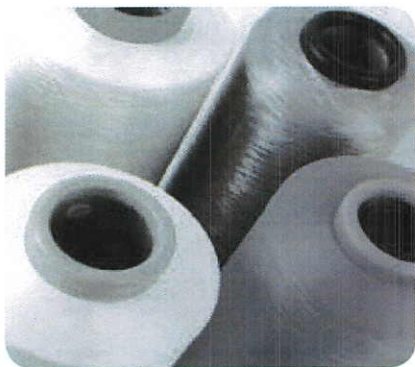
产品采用聚丙烯内涂膜编织袋、FFS薄膜袋或集装袋包装，净重25 Kg /袋或700 Kg /袋。

产品应存放在通风、干燥的仓库内，远离火源，防止阳光直接照射，不得露天堆放。产品运输时不得在阳光下曝晒或雨淋，不得与沙土、碎金属、煤炭、玻璃等混合装运，更不可与有毒物质、腐蚀性和易燃物品混装。

Package, Storage and Transportation

The resin is packaged in internally film-coated polypropylene woven bags, FFS bags or container bags and the net weight is 25Kg/bag or 700Kg/bag.

The resin should be stored in a drafty, dry warehouse and away from fire and direct sunlight. It should not be piled up in the open air. During transportation, the material should not be exposed to strong sunlight or rain and should not be transported together with sand, soil, scrap metal, coal or glass. Transportation together with toxic, corrosive and flammable substance is strictly prohibited.



Processing

HF1820X is formulated for cast monolayer and coextruded film, and has good thermal stability at elevated temperatures.

Handling

Workers should be protected from the possibility of skin or eye contact with molten polymer. Safety glasses are suggested as a minimal protection to prevent possible mechanical or thermal injury to the eyes. Fabrication areas should be ventilated to carry away fumes or vapours. Please consult the material safety data sheet (SDS) for more detailed information.

Storage

As ultraviolet light may cause a change in the material, all resins should be protected from direct sunlight during storage. If stored in cool (<25°C), dry area with low ambient light levels, polyolefin resins are expected to maintain their original material and processing properties for at least 12 months.

Combustibility

Polyethylene resins will burn when supplied adequate heat and oxygen. They should be handled and stored away from contact with direct flames and/or other ignition sources. In burning, polyethylene resins contribute high heat and may generate a dense black smoke. Fires can be extinguished by conventional means with water and water mist preferred. In enclosed areas, fire fighters should be provided with self contained breathing apparatus.

Conveying

Conveying equipment should be designed to prevent accumulation of fines and dust particles that are contained in all polypropylene resins. The fines and dust particles can, under certain conditions, pose an explosion hazard. We recommend that the conveying system used:

- be equipped with adequate filters
- is operated and maintained in such a manner to ensure no leaks develop
- that adequate grounding exists at all times

It is further recommended that good housekeeping is practiced throughout the facility.

This publication contains information provided in good faith and is indicative, based on Sasol's current knowledge on the subject. No guarantee or warranty is intended or implied. We reserve the right to make changes as a result of technological progress or development. Any information, including suggestions for use of products, should not preclude experimental testing and verification, to ensure the suitability of a product for each specific application. Users must also abide by local and international laws and obtain all necessary permits when required to do so. Prior to handling a hazardous product, consult its safety data sheet. In case of questions or queries, please contact Sasol through our customer service channels. All products purchased or supplied by Sasol Chemicals are subject to the terms and conditions set out in the contract, order confirmation and/or bill of lading. All data herein not to be construed as specifications.



H045SG

HOMOPOLYMER

WOVEN SACKS & MONO FILAMENT

Repol H045SG is recommended for flat tape yarns for applications like Geotextiles, Packaging sacks & General purpose wrapping fabrics. The grade is specially designed for high speed processing on tape lines with consistent process ability. Repol H045SG is an ideal material for low denier flat tape yarns.

TYPICAL CHARACTERISTICS			
PROPERTY	TEST METHOD	UNIT	TYPICAL VALUE*
Melt Flow Rate, (230°C / 2.16kg)	ASTM D1238	g/10min	4.5
Tensile Strength at Yield (50mm/min)	ASTM D638	MPa	32
Elongation at Yield (50mm/min)	ASTM D638	%	8
Flexural Modulus (1% secant)	ASTM D790A	MPa	1350
Notched Izod Impact strength (23°C)	ASTM D256	J/m	30
Heat Deflection Temperature (455 kPa)	ASTM D648	°C	104

* Typical values, not to be taken as specification.

* Tensile properties as per ASTM D638 Type-I specimen injection molded and tested in accordance with ASTM D 4101

Applications : Flat tape yarns for Geotextiles, Packaging sacks and Low weight wrapping fabrics;

Regulatory Information: Meets the requirements stipulated in IS 10910 on "Specification for Polypropylene and its copolymers for safe use in contact with foodstuffs, pharmaceuticals, and drinking water". Additives incorporated in this grade conform to the positive list of constituents as prescribed in IS 10909. The grade and the additives incorporated in it also comply with the FDA:CFR Title 21, 177.1520, Olefin polymers.

Storage Recommendations: Bags should be stored in dry conditions at temperatures below 50°C and protected from UV / direct sunlight

Product Application & Research Centre (PARC)

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Feb. 2014