EPC GmbH

Eberhardt
Parts and Components

EPC Petrochemical Products

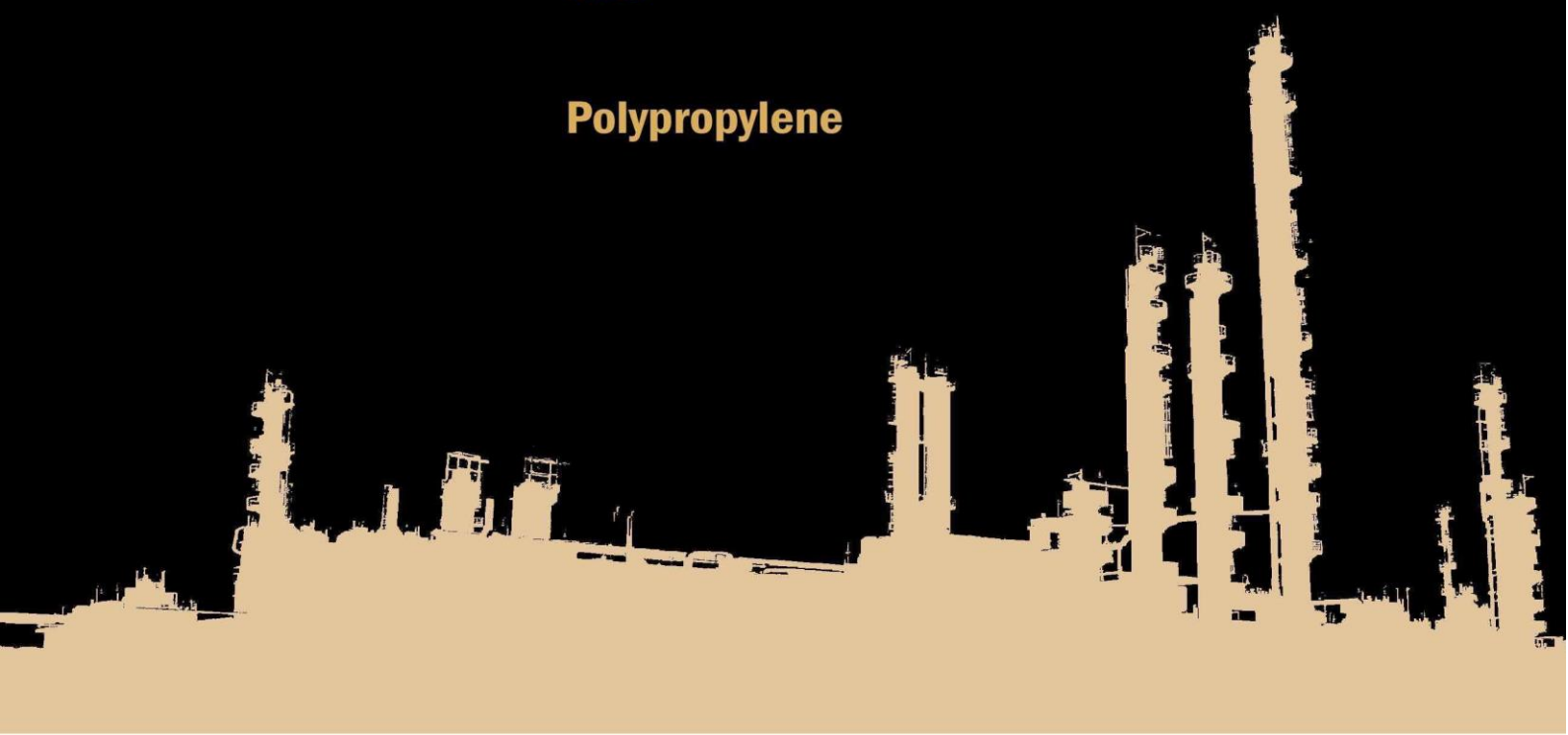
INDEX

Polyethylene

Polystyrene

ABS

Polypropylene



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EPC Petrochemical Products

EPC GmbH

EPC Germany GmbH. Steinhoffweg 14, 22453 Hamburg / Germany

EPC 3840 UA

EPC 3840 UA is high density polyethylene copolymer containing butene-1(C4) as comonomer.
It is suitable for use as rotational moulding applications.

EPC 3840 UA has the following characteristics:
Good impact strength, easy to demould, uv stabilised, good whiteness,excellent surface finish.

Applications:
General purpose rotomolded items, septic tanks, recycling banks

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Physical and Mechanical Properties

Property	Unit	Test Method	Typical Value
MELT FLOW INDEX (2.16KG)	g/10min	ASTM D-1238	4
DENSITY	gr/cm3	ASTM D-1505	0.938
YELLOWNESS INDEX	-	ASTM E-313	-1
WHITENESS INDEX	-	ASTM E-313	60
CONTAMINATION	NO.	BP137	5
VICAT SOFTENING POINT	°C	ASTM D-1525	115
TENSILE STRESS AT YEILD	MPA	ASTM D-638	15
ELONGATION AT BREAK	%	ASTM D-638	900
ESCR (IGEPAL10% F50,23°C)	HR	ASTM D-1693	350
CHARPY IMPACT	KJ/M2	ASTM D-6110	18

*All above mentioned data are typical values and not to be construed as real specifications.Users should confirm results by their own tests. For more information about guaranteed items, please refer to S.S.S.(Standard Sales Specifications)
**Rotomoulded Bucket-23 Liters-3mm Thickness-1.2Kg
Grade Suffix (Additives Indication) : UA : GENERAL ANTIOXIDANT AND LIGHT STABLISER

EPC 4005 EA

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EPC4005EA is high density polyethylene copolymer containing butene-1(C4) as comonomer.
It is suitable for use as pipe coating applications.
EPC4005EA has the following characteristics:
Good impact strength and chemical resistance, high ESCR

Applications:
Pipe coating applications

Physical and Mechanical Properties

Property	Unit	Test Method	Typical Value
MELT FLOW INDEX (2.16KG)	g/10min	ASTM D-1238	0.5
DENSITY	gr/cm3	ASTM D-1505	0.940
TENSILE STRESS AT YEILD	MPA	ASTM D-638	17
TENSILE STRESS AT BREAK	MPA	ASTM D-638	26
ELONGATION AT BREAK	%	ASTM D-638	600
O.I.T.	MIN	ASTM D-3895	45
HARDNESS	-	ASTM D-2240	55
MELTING POINT	°C	ASTM D-1525	125
VICAT SOFTENING POINT	°C	ASTM D-1525	115

*All above mentioned data are typical values and not to be construed as real specifications.Users should confirm results by their own tests. For more information about guaranteed items, please refer to S.S.S.(Standard Sales Specifications)
Grade Suffix (Additives Indication) :
EA:GENERAL ANTIOXIDANT

EPC 4440 EA

EPC4440EA is high density polyethylene copolymer It is suitable as based resin for crosslinked polyethylene pipes.
EPC4440EA has the following characteristics:
Good impact strength,excellent surface finish.

Applications:
Non pressurized pipe with silane technology

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Physical and Mechanical Properties

Property	Unit	Test Method	Typical Value
MELT FLOW INDEX (2.16KG)	g/10min	ASTM D-1238	4
DENSITY	gr/cm3	ASTM D-1505	0.944
YELLOW INDEX	-	ASTM E-313	-1
WHITENESS INDEX	-	ASTM E-313	60
CONTAMINATION	NO.	BP137	5
TENSILE STRESS AT YEILD	MPA	ASTM D-638	18
TENSILE STRESS AT BREAK	MPA	ASTM D-638	23
ELONGATION AT BREAK	%	ASTM D-638	800

*All above mentioned data are typical values and not to be construed as real specifications.Users should confirm results by their own tests. For more information about guaranteed items, please refer to S.S.S.(Standard Sales Specifications)
Grade Suffix (Additives Indication) :
EA : GENERAL ANTIOXIDANT

EPC 5030 SA

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EPC5030SA is high density polyethylene copolymer containing butene-1(C4) as comonomer with medium content of slip agent additive.

EPC5030SA has the following characteristics:
Good impact strength, excellent surface finish, caps with torque free property

Applications:
Caps and closures for packaging

Physical and Mechanical Properties

Property	Unit	Test Method	Typical Value
MELT FLOW INDEX (2.16KG)	g/10min	ASTM D-1238	1.8
DENSITY	gr/cm3	ASTM D-1505	0.948
YELLOW INDEX	-	ASTM E-313	-1
WHITENESS INDEX	-	ASTM E-313	60
CONTAMINATION	NO.	BP137	5
VICAT SOFTENING POINT	°C	ASTM D-1525	112
TENSILE STRESS AT YEILD	MPA	ASTM D-638	20
ELONGATION AT BREAK	%	ASTM D-638	1100
CHARPY IMPACT	KJ/M2	ASTM D-6110	15

*All above mentioned data are typical values and not to be construed as real specifications.Users should confirm results by their own tests. For more information about guaranteed items, please refer to S.S.S.(Standard Sales Specifications)
Grade Suffix (Additives Indication) :
SA:GENERAL ANTIOXIDANT AND SLIP AGENT

EPC 5218

EPC5218 is high density polyethylene copolymer containing butene-1(C4) as comonomer.
It is suitable for thin wall injection moulding applications.
EPC5218 has the following characteristics:
High warpage resistance, high flow, fast cycling injection moulding,uv stabilised.

Applications:
General purpose injection moulding with outdoor & indoor applications.

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Physical and Mechanical Properties

Property	Unit	Test Method	Typical Value
MELT FLOW INDEX (2.16KG)	g/10min	ASTM D-1238	18
DENSITY	gr/cm3	ASTM D-1505	0.952
YELLOW INDEX	-	ASTM E-313	-1
WHITENESS INDEX	-	ASTM E-313	60
CONTAMINATION	NO.	BP137	5
VICAT SOFTENING POINT	°C	ASTM D-1525	115
TENSILE STRESS AT YEILD	MPA	ASTM D-638	20
ELONGATION AT BREAK	%	ASTM D-638	900
CHARPY IMPACT	KJ/M2	ASTM D-6110	3

*All above mentioned data are typical values and not to be construed as real specifications.Users should confirm results by their own tests. For more information about guaranteed items, please refer to S.S.S.(Standard Sales Specifications)
Grade Suffix (Additives Indication) :
UA : GENERAL ANTIOXIDANT AND LIGHT STABLISER

EPC 5030 SA

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Parts and Components

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EPC5030SA is high density polyethylene copolymer containing butene-1(C4) as comonomer with medium content of slip agent additive.

EPC5030SA has the following characteristics:
Good impact strength, excellent surface finish, caps with torque free property

Applications:
Caps and closures for packaging

Physical and Mechanical Properties

Property	Unit	Test Method	Typical Value
MELT FLOW INDEX (2.16KG)	g/10min	ASTM D-1238	1.8
DENSITY	gr/cm3	ASTM D-1505	0.948
YELLOW INDEX	-	ASTM E-313	-1
WHITENESS INDEX	-	ASTM E-313	60
CONTAMINATION	NO.	BP137	5
VICAT SOFTENING POINT	°C	ASTM D-1525	112
TENSILE STRESS AT YEILD	MPA	ASTM D-638	20
ELONGATION AT BREAK	%	ASTM D-638	1100
CHARPY IMPACT	KJ/M2	ASTM D-6110	15

*All above mentioned data are typical values and not to be construed as real specifications.Users should confirm results by their own tests. For more information about guaranteed items, please refer to S.S.S.(Standard Sales Specifications)
Grade Suffix (Additives Indication) :
SA:GENERAL ANTIOXIDANT AND SLIP AGENT

EPC 6070 UA

EPC6070UA is high density polyethylene copolymer containing butene-1(C4) as comonomer with medium content of light stabliser additives.
It is suitable for general purpose injection moulding items.
EPC6070UA has the following characteristics:
Good impact strength, easy processing, high warpage resistance,high rigidity,uv stablised.

Applications:
Crates, boxes, seats

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Physical and Mechanical Properties

Property	Unit	Test Method	Typical Value
MELT FLOW INDEX (2.16KG)	g/10min	ASTM D-1238	7
DENSITY	gr/cm3	ASTM D-1505	0.960
YELLOW INDEX	-	ASTM E-313	-1
WHITENESS INDEX	-	ASTM E-313	60
CONTAMINATION	NO.	BP137	5
VICAT SOFTENING POINT	°C	ASTM D-1525	120
TENSILE STRESS AT YEILD	MPA	ASTM D-638	26
ELONGATION AT BREAK	%	ASTM D-638	900
CHARPY IMPACT	KJ/M2	ASTM D-6110	5

*All above mentioned data are typical values and not to be construed as real specifications.Users should confirm results by their own tests. For more information about guaranteed items, please refer to S.S.S.(Standard Sales Specifications)
Grade Suffix (Additives Indication) :
UA : GENERAL ANTIOXIDANT AND LIGHT STABLISER

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EPC 6040 UA

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EPC6040UA is high density polyethylene copolymer containing butene-1(C4) as comonomer with medium content of light stabliser additive.
EPC6040UA has the following characteristics:
Good impact strength, excellent surface finish.

Applications:
Large dustbins and pails,pallet

Physical and Mechanical Properties

Property	Unit	Test Method	Typical Value
MELT FLOW INDEX (2.16KG)	g/10min	ASTM D-1238	3.7
DENSITY	gr/cm3	ASTM D-1505	0.960
YELLOW INDEX	-	ASTM E-313	-1
WHITENESS INDEX	-	ASTM E-313	60
CONTAMINATION	NO.	BP137	5
VICAT SOFTENING POINT	°C	ASTM D-1525	112
TENSILE STRESS AT YEILD	MPA	ASTM D-638	20
ELONGATION AT BREAK	%	ASTM D-638	700
CHARPY IMPACT	KJ/M2	ASTM D-6110	10

*All above mentioned data are typical values and not to be construed as real specifications.Users should confirm results by their own tests. For more information about guaranteed items, please refer to S.S.S.(Standard Sales Specifications)
Grade Suffix (Additives Indication) :
UA : GENERAL ANTIOXIDANT AND LIGHT STABLISER

EPC 6070 UA

EPC6070UA is high density polyethylene copolymer containing butene-1(C4) as comonomer with medium content of light stabliser additives.
It is suitable for general purpose injection moulding items.
EPC6070UA has the following characteristics:
Good impact strength, easy processing, high warpage resistance,high rigidity,uv stablised.

Applications:
Crates, boxes, seats

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Physical and Mechanical Properties

Property	Unit	Test Method	Typical Value
MELT FLOW INDEX (2.16KG)	g/10min	ASTM D-1238	7
DENSITY	gr/cm3	ASTM D-1505	0.960
YELLOW INDEX	-	ASTM E-313	-1
WHITENESS INDEX	-	ASTM E-313	60
CONTAMINATION	NO.	BP137	5
VICAT SOFTENING POINT	°C	ASTM D-1525	120
TENSILE STRESS AT YEILD	MPA	ASTM D-638	26
ELONGATION AT BREAK	%	ASTM D-638	900
CHARPY IMPACT	KJ/M2	ASTM D-6110	5

*All above mentioned data are typical values and not to be construed as real specifications.Users should confirm results by their own tests. For more information about guaranteed items, please refer to S.S.S.(Standard Sales Specifications)
Grade Suffix (Additives Indication) :
UA : GENERAL ANTIOXIDANT AND LIGHT STABLISER

EPC Petrochemical Products

EPC GmbH

EPC 0209 AA

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Parts and Components

www.germany-epc.com
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EPC0209AA is linear low density polyethylene copolymer containing butene-1(C4) as comonomer.It is suitable for blending with conventional LDPE :
Better sealing,higher puncture resistance,greater drawdown ability and higher tensile strength.

Applications:
Green house film, silage film, hand bags and general purpose film applications.

Physical and Mechanical Properties

Property		Unit	Test Method	Typical Value
MELT FLOW INDEX (2.16KG)		g/10min	ASTM D-1238	0.9
DENSITY		gr/cm3	ASTM D-1505	0.921
VICAT SOFTENING POINT		°C	ASTM D-1525	105
FILM**				
DART DROP IMPACT	METHOD A	GR	ASTM D-1709	100
TENSILE STRESS AT YEILD	MD/TD	MPA	ASTM D-882	10/11
TENSILE STRESS AT BREAK	MD/TD	MPA	ASTM D-882	41/32
ELONGATION AT BREAK	MD/TD	%	ASTM D-882	620/840
HAZE	-	%	ASTM D-1003	12
GLOSS(45°)	-	%	ASTM D-2457	36

*All above mentioned data are typical values and not to be construed as real specifications.Users should confirm results by their own tests.For more information about guaranteed items, please refer to S.S.S.(Standard Sales Specifications)
**38µm film,2.5:1 blow up ratio,225°c melt temperature , MD: Machine Direction,TD : Ttransverse Direction
Grade Suffix(Additives Indication):
AA:GENERAL ANTIOXIDANT

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EPC 0209 KJ

EPC0209KJ is linear low density polyethylene copolymer containing butene-1(C4) as comonomer.It is suitable for blending with conventional LDPE :
Film made from pure has the following advantages over LDPE:
Better sealing,higher puncture resistance,greater drawdown ability, easy opening properties at 2 layer film and higher tensile strength.

Applications:
Green house film,silage film,hand bags and general purpose film applications.

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Physical and Mechanical Properties

Property		Unit	Test Method	Typical Value
MELT FLOW INDEX (2.16KG)		g/10min	ASTM D-1238	0.9
DENSITY		gr/cm3	ASTM D-1505	0.921
VICAT SOFTENING POINT		°C	ASTM D-1525	105
FILM**				
DART DROP IMPACT	METHOD A	GR	ASTM D-1709	100
TENSILE STRESS AT YEILD	MD/TD	MPA	ASTM D-882	10/11
TENSILE STRESS AT BREAK	MD/TD	MPA	ASTM D-882	41/32
ELONGATION AT BREAK	MD/TD	%	ASTM D-882	620/840
HAZE	-	%	ASTM D-1003	12
GLOSS(45°)	-	%	ASTM D-2457	36

*All above mentioned data are typical values and not to be construed as real specifications.Users should confirm results by their own tests.For more information about guaranteed items, please refer to S.S.S.(Standard Sales Specifications)
**38µm film,2.5:1 blow up ratio,225°c melt temperature , MD: Machine Direction,TD : Ttransverse Direction
Grade Suffix (Additives Indication):
KJ:GENERAL ANTIOXIDANT WITH SLIP AGENT/ANTIBLOCKING AGENTS

EPC 0220 AA

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info@germany-epc.com

EPC0220AA is linear low density polyethylene copolymer containing butene-1(C4) as comonomer.It is suitable for blending with conventional LDPE for cast film applications.
Film made from pure has the following advantages over LDPE:
Good balance of mechanical properties, good optical properties

Applications:
Light and medium duty films,stretch film

Physical and Mechanical Properties

Property		Unit	Test Method	Typical Value
MELT FLOW INDEX (2.16KG)		g/10min	ASTM D-1238	2.4
DENSITY		gr/cm3	ASTM D-1505	0.921
VICAT SOFTENING POINT		°C	ASTM D-1525	100
FILM**				
DART DROP IMPACT	METHOD A	GR	ASTM D-1709	90
TENSILE STRESS AT YEILD	MD/TD	MPA	ASTM D-882	10/11
TENSILE STRESS AT BREAK	MD/TD	MPA	ASTM D-882	30/25
ELONGATION AT BREAK	MD/TD	%	ASTM D-882	1000/1100
HAZE	-	%	ASTM D-1003	1
GLOSS(45°)	-	%	ASTM D-2457	30

*All above mentioned data are typical values and not to be construed as real specifications.Users should confirm results by their own tests.For more information about guaranteed items, please refer to S.S.S.(Standard Sales Specifications)
**38μm film,2.5:1 blow up ratio,225°c melt temperature , MD: Machine Direction,TD : Ttransverse Direction
Grade Suffix (Additives Indication):
AA : GENERAL ANTIOXIDANT

EPC Petrochemical Products

EPC GmbH

EPC 0220 KJ

EPC0220KJ is linear low density polyethylene copolymer containing butene-1(C4) as comonomer.It is suitable for blending with conventional LDPE for cast film applications. Film made from pure has the following advantages over LDPE:
Good balance of mechanical properties,good optical properties properties,easy opening properties in 2 layer film.

Applications:
Light and medium duty films with good optical properties.

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Physical and Mechanical Properties

Property		Unit	Test Method	Typical Value
MELT FLOW INDEX (2.16KG)		g/10min	ASTM D-1238	2.4
DENSITY		gr/cm3	ASTM D-1505	0.921
VICAT SOFTENING POINT		°C	ASTM D-1525	100
FILM**				
DART DROP IMPACT	METHOD A	GR	ASTM D-1709	90
TENSILE STRESS AT YEILD	MD/TD	MPA	ASTM D-882	10/11
TENSILE STRESS AT BREAK	MD/TD	MPA	ASTM D-882	30/25
ELONGATION AT BREAK	MD/TD	%	ASTM D-882	1000/1100
HAZE	-	%	ASTM D-1003	1
GLOSS(45°)	-	%	ASTM D-2457	30

*All above mentioned data are typical values and not to be construed as real specifications.Users should confirm results by their own tests.For more information about guaranteed items, please refer to S.S.S.(Standard Sales Specifications)
**38µm film,2.5:1 blow up ratio,225°c melt temperature , MD: Machine Direction,TD : Ttransverse Direction
Grade Suffix (Additives Indication):
KJ:GENERAL ANTIOXIDANT WITH SLIP AGENT/ANTIBLOCKING AGENTS

EPC Petrochemical Products

EPC GmbH

EPC 0410 AA

Eberhardt
Parts and Components

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EPC0410AA is linear low density polyethylene copolymer containing butene-1(C4) as comonomer.It is suitable for blending with conventional LDPE .
Film made from pure has the following advantages over LDPE: **EPC0410AA**
Better sealing, lower seal shrinkage, greater drowdown ability and higher stiffness & toughness

Applications:
Green house film, silage film, hand bags and general purpose film applications

Physical and Mechanical Properties

Property		Unit	Test Method	Typical Value
MELT FLOW INDEX (2.16KG)		g/10min	ASTM D-1238	0.8
DENSITY		gr/cm3	ASTM D-1505	0.926
VICAT SOFTENING POINT		°C	ASTM D-1525	107
FILM**				
DART DROP IMPACT	METHOD A	GR	ASTM D-1709	80
TENSILE STRESS AT YEILD	MD/TD	MPA	ASTM D-882	12/13
TENSILE STRESS AT BREAK	MD/TD	MPA	ASTM D-882	42/33
ELONGATION AT BREAK	MD/TD	%	ASTM D-882	620/850
HAZE	-	%	ASTM D-1003	12
GLOSS(45°)	-	%	ASTM D-2457	36

*All above mentioned data are typical values and not to be construed as real specifications.Users should confirm results by their own tests.For more information about guaranteed items, please refer to S.S.S.(Standard Sales Specifications)
**38µm film,2.5:1 blow up ratio,225°c melt temperature , MD: Machine Direction,TD : Ttransverse Direction
Grade Suffix (Additives Indication):
KJ:GENERAL ANTIOXIDANT WITH SLIP AGENT/ANTIBLOCKING AGENTS

EPC Petrochemical Products

EPC GmbH

EPC 7240

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Parts and Components

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EPC7240 is a very high impact polystyrene for the extrusion industry.This grade has been designed to diluted with crystal polystyrene.
The good melt strength of this grade makes it particularly suited for deep-draw thermoforming.
EPC7240 is available in white color.

Applications:
Darty sheet, cups, trays,egg boxes, general packaging, coextrusion with GPPS at industrial sheets.

Physical and Mechanical Properties

Property	Unit	Test Method	Typical Value
MELT FLOW INDEX (200°C 5KG)	g/10min	ASTM D-1238	4.5
STYRENE RESIDUAL MONOMER	PPM	CLG LABPSG004 (ATOFINA TEST METHOD)	<500
VICAT SOFTENING POINT (50 °C/hr 1kg)	°C	ASTM D-1525	97
ROCKWELL HARDNESS	-	ASTM D-785	SCALE/R65
TENSILE STRESS AT YEILD	MPA	ASTM D-638	23
TENSILE STRENGTH AT BREAK	MPA	ASTM D-638	21
ELONGATION AT BREAK	%	ASTM D-638	60
TENSILE MODULUS	MPA	ASTM D-638	1950
IZOD IMPACT	KJ/M2	ASTM D-256	11

*All above mentioned data are typical values and not to be construed as real specifications.Users should confirm results by their own tests. For more information about guaranteed items, please refer to S.S.S.(Standard Sales Specifications)
Density and shrinkage of this grade are approximately around 1.04 kg/lit & (0.4-0.7)%(ASTM D-955) respectively.
All test are carried out at 23°C , unless otherwise stated.
If in grade reference the fourth digit is "1"(7241) ,indicates an external lubricants is included.

EPC 7350 ESCR

EPC7350ESCR is a high impact polystyrene grade with improved stress cracked resistance compared to conventional high impact polystyrene.
The excellent melt strength of this grade makes it particularly suited for deep-draw thermoforming. It offers good environmental stress crack resistance at low temperatures, rendering it suitable for frozen packaging, refrigerator liners and door paneling while retaining good mechanical properties.
It is recommended for packaging applications such as oily food and dairy products.

Applications:
Sheet extrusion application, Refrigerator inner liner, Refrigerator door liner,Packaging applications for oily food and dairy products

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Physical and Mechanical Properties

Property	Unit	Test Method	Typical Value
MELT FLOW INDEX (200°C 5KG)	g/10min	ASTM D-1238	4
STYRENE RESIDUAL MONOMER	PPM	CLG LABPSG004 (ATOFINA TEST METHOD)	<500
VICAT SOFTENING POINT (50 °C/hr 1kg)	°C	ASTM D-1525	MIN93
TENSILE STRESS AT YEILD	MPA	ASTM D-638	18
TENSILE STRENGTH AT BREAK	MPA	ASTM D-638	20
ELONGATION AT BREAK	%	ASTM D-638	50
TENSILE MODULUS	MPA	ASTM D-638	1600
IZOD IMPACT	KJ/M2	ASTM D-256	12

*All above mentioned data are typical values and not to be construed as real specifications.Users should confirm results by their own tests. For more information about guaranteed items, please refer to S.S.S.(Standard Sales Specifications)
Density and shrinkage of this grade are approximately around 1.04 kg/lit & (0.4-0.7)%(ASTM D-955) respectively.
All test are carried out at 23°C , unless otherwise stated.

EPC 7350 ESCR

EPC7350ESCR is a high impact polystyrene grade with improved stress cracked resistance compared to conventional high impact polystyrene.
The excellent melt strength of this grade makes it particularly suited for deep-draw thermoforming. It offers good environmental stress crack resistance at low temperatures, rendering it suitable for frozen packaging, refrigerator liners and door paneling while retaining good mechanical properties.
It is recommended for packaging applications such as oily food and dairy products.

Applications:
Sheet extrusion application, Refrigerator inner liner, Refrigerator door liner,Packaging applications for oily food and dairy products

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info@germany-epc.com

Physical and Mechanical Properties

Property	Unit	Test Method	Typical Value
MELT FLOW INDEX (200°C 5KG)	g/10min	ASTM D-1238	4
STYRENE RESIDUAL MONOMER	PPM	CLG LABPSG004 (ATOFINA TEST METHOD)	<500
VICAT SOFTENING POINT (50 °C/hr 1kg)	°C	ASTM D-1525	MIN93
TENSILE STRESS AT YEILD	MPA	ASTM D-638	18
TENSILE STRENGTH AT BREAK	MPA	ASTM D-638	20
ELONGATION AT BREAK	%	ASTM D-638	50
TENSILE MODULUS	MPA	ASTM D-638	1600
IZOD IMPACT	KJ/M2	ASTM D-256	12

*All above mentioned data are typical values and not to be construed as real specifications.Users should confirm results by their own tests. For more information about guaranteed items, please refer to S.S.S.(Standard Sales Specifications)
Density and shrinkage of this grade are approximately around 1.04 kg/lit & (0.4-0.7)%(ASTM D-955) respectively.
All test are carried out at 23°C , unless otherwise stated.

EPC Petrochemical Products

EPC GmbH

EPC 8350

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Parts and Components

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EPC8350 is a very high impact polystyrene for extrusion sheets with improved ESCR in comparision with other standard high impact polystyrene such as HIPS 7240 The good melt strength of this grade makes it particularly suited for deep-draw thermoforming.
It is recommended for the production of packaging intended for products likely to cause stress cracking example fats and oils.

EPC8350 retains good mechanical properties at low temperatures making this grade suitable for frozen food packaging and for the production of fridge liners in contact with "HCFC" expanded foam insulation.

Applications:
Thermoforming, fridge doors and cabinet liners, packaging for fatty foods sheets.

Physical and Mechanical Properties

Property	Unit	Test Method	Typical Value
MELT FLOW INDEX (200°C 5KG)	g/10min	ASTM D-1238	4.5
STYRENE RESIDUAL MONOMER	PPM	CLG LABPSG004 (ATOFINA TEST METHOD)	<500
VICAT SOFTENING POINT (50 °C/hr 1kg)	°C	ASTM D-1525	96
ROCKWELL HARDNESS	-	ASTM D-785	SCALE/R54
TENSILE STRESS AT YEILD	MPA	ASTM D-638	18
TENSILE STRENGTH AT BREAK	MPA	ASTM D-638	20
ELONGATION AT BREAK	%	ASTM D-638	60
TENSILE MODULUS	MPA	ASTM D-638	1600
IZOD IMPACT	KJ/M2	ASTM D-256	13

*All above mentioned data are typical values and not to be construed as real specifications.Users should confirm results by their own tests. For more information about guaranteed items, please refer to S.S.S.(Standard Sales Specifications)
Density and shrinkage of this grade are approximately around 1.04 kg/lit & (0.4-0.7)%(ASTM D-955) respectively.
All test are carried out at 23°C , unless otherwise stated.

EPC Petrochemical Products

EPC GmbH

EPC 1540

EPC1540 is an easy flowing crystal polystyrene designed for extrusion or injection applications.
It improves extruder output and thermoforming cycle time when mixed with a high impact polystyrene such as EPC7240.It is particularly suitable for glossy-layer coextrusion.

Applications:
Packaging articles,petri dishes,office equipments,pen barrels,crisper boxes for refrigerators,cups gloss layer coextrusion.anionic styrene butadiene copolymer dilution.

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Physical and Mechanical Properties

Property	Unit	Test Method	Typical Value
MELT FLOW INDEX (200°C 5KG)	g/10min	ASTM D-1238	11
STYRENE RESIDUAL MONOMER	PPM	CLG LABPSG004 (ATOFINA TEST METHOD)	<500
VICAT SOFTENING POINT (50 °C/hr 1kg)	°C	ASTM D-1525	91
ROCKWELL HARDNESS	-	ASTM D-785	SCALE/L70
TENSILE STRENGTH AT BREAK	MPA	ASTM D-638	42
ELONGATION AT BREAK	%	ASTM D-638	2
TENSILE MODULUS	MPA	ASTM D-638	3100

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Density and shrinkage of this grade are approximately around 1.04 kg/lit & (0.4-0.7)%(ASTM D-955) respectively.
All test are carried out at 23°C , unless otherwise stated.
If in grade reference the fourth digit is "1"(1541) ,indicates an external lubricants is included.
If the injection molding products quality is affected by moisture,granules of GPPS could be dried at 70°C for 2-4 hours.

EPC Petrochemical Products

EPC GmbH

EPC 1460

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EPC1460 is a high heat resistance and molecular weight crystal polystyrene for extrusion and thick walled injection moulding application.
It is particularly useful in the production of thick sheet by direct inject gassing, where it gives expanded sheets with high mechanical properties

Applications:
insulation board(xps), foam sheet of food & fruits trays

Physical and Mechanical Properties

Property	Unit	Test Method	Typical Value
MELT FLOW INDEX (200°C 5KG)	g/10min	ASTM D-1238	6.5
STYRENE RESIDUAL MONOMER	PPM	CLG LABPSG004 (ATOFINA TEST METHOD)	<500
VICAT SOFTENING POINT (50 °C/hr 1kg)	°C	ASTM D-1525	103
TENSILE STRENGTH AT BREAK	MPA	ASTM D-638	48
ELONGATION AT BREAK	%	ASTM D-638	1
TENSILE MODULUS	MPA	ASTM D-638	3200

*All above mentioned data are typical values and not to be construed as real specifications.Users should confirm results by their own tests. For more information about guaranteed items, please refer to S.S.S.(Standard Sales Specifications)
Density and shrinkage of this grade are approximately around 1.04 kg/lit & (0.4-0.7)%(ASTM D-955) respectively.
All test are carried out at 23°C , unless otherwise stated.
If the injection molding products quality is affected by moisture,granules of GPPS could be dried at 70°C for 2-4 hours.

EPC Petrochemical Products

EPC 1160

EPC1160 is a high heat resistance and molecular weight crystal polystyrene for extrusion and bioriented polystyrene(OPS) industry.It is particularly useful in the production of thick sheet by direct inject gassing,where it gives expanded sheets with high mechanical properties. **EPC1160** can also be used in dilution with 7240 for extrusion of sheet for thermoforming.

Applications:
Shower cabinets, lighting thin films,insulation board,foam sheet of fruits trays,meat trays,egg boxes.

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Physical and Mechanical Properties

Property	Unit	Test Method	Typical Value
MELT FLOW INDEX (200°C 5KG)	g/10min	ASTM D-1238	2.5
STYRENE RESIDUAL MONOMER	PPM	CLG LABPSG004 (ATOFINA TEST METHOD)	<500
VICAT SOFTENING POINT (50 °C/hr 1kg)	°C	ASTM D-1525	105
ROCKWELL HARDNESS	-	ASTM D-785	SCALE/L70
TENSILE STRENGTH AT BREAK	MPA	ASTM D-638	48
ELONGATION AT BREAK	%	ASTM D-638	3
TENSILE MODULUS	MPA	ASTM D-638	3200

*All above mentioned data are typical values and not to be construed as real specifications.Users should confirm results by their own tests. For more information about guaranteed items, please refer to S.S.S.(Standard Sales Specifications)
Density and shrinkage of this grade are approximately around 1.04 kg/lit & (0.4-0.7)%(ASTM D-955) respectively.
All test are carried out at 23°C , unless otherwise stated.
If in grade reference the fourth digit is "1"(1161) ,indicates an external lubricants is included.
If the injection molding products quality is affected by moisture,granules of GPPS could be dried at 70°C for 2-4 hours.

EPC Petrochemical Products

EPC GmbH

EPC EPS

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General Informations:
Standard expandable polystyrene EPS is manufactured by the suspensionpolymerization method .
The polymerization is generally carried out in a batch process.
Various grades of EPS supplied in free-flowing beads contain pentane (CFC free) as a foaming agent .
It is used for fast cycle low destiny block mold application with goodsurface finish.

Available Grades:

TYPES	HIGH STRENGTH (HS)	FAST CYCLE (FC)	WATER PROOF (WP)	SPECIAL EXTRUSION (EX)
GRADE	121,221,321	323,422,522	326,426,526	600

Applications: Grades of each type differ only in bead size not in composition.

Type&Grade	Bead size (mm)	Typical end product density (kg/m3)	Typical applications
TPC - 121 HS	1.8 - 2.5	13 – 25	Low density blocks
TPC - 221 HS	1.0 – 1.8	14 – 30	Low – Medium density blocks
TPC - 321 HS	0.7 – 1.0	18 – 30	Shape molding with wall thickness > 10 mm,and medium – high density blocks
TPC - 323 FC	0.7 – 1.0	18 – 30	Faster cycling shape molding with wall thickness >10mm.&medium-high density blocks
TPC - 422 FC	0.5 – 0.7	20 – 35	Faster cycling shape molding of 6-10mm wall thickness suitable for high quality products demanding improved surface finish and high strength
TPC - 522 FC	0.3 – 0.5	22 – 50	Very thin wall shape molding with wall thickness <6mm suitable for high quality products demanding improved surface finish and high strength
TPC - 600 EX	UP TO 0.3	----	Special type for extrusion
TPC - 326 WP	0.7 – 1.0	18 – 30	Low water absortion,longer cycling shape molding with wall thickness >10 mm
TPC - 426 WP	0.5 – 0.7	10 – 35	Very low water absortion, cycling shape molding of 6-10 mm wall thickness
TPC - 526 WP	0.3 – 0.5	22 – 50	Very thin-wall water proof shape molding products with wall thickness <6 mm such as drinking cups

Lower densities can be achieved by double pre expansion.

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EPC PP045
Polypropylen

EPCPP046 is homopolymer grade with isotactic degree around 94% in form of powder without stabilizers. This grade has medium molecular weight and outstanding mechanical properties.

Applications:
High stiffness & gloss, high heating resistance, good scratch resistance & color ability, home appliance parts (kettle, electric cooker, etc.) and compounding

Physical and Mechanical Properties

Property	Unit	Test Method	Typical Value
MFI (@230°C &2.16KG)	GR/10MIN	ISO1133	4.5
DENSITY	GR/CM3	ASTM D1505	0.9
ISOTACTIC DEGREE	%	ISO 9113	>=94
ASH CONTENT	PPM(WT)	ISO 3451-1	<=350
CHLORINE CONTENT	PPM(WT)	ENCO METHOD	<=100
VOLATILE CONTENT	%WT	ENCO METHOD	<=0.2
BULK DENSITY	GR/CM3	ASTM D1895	0.43
TENSILE STRENGTH AT YEILD (50mm/min)	MPA	ISO 527	32
ELONGATION AT YEILD (50mm/min)	%	ISO 527	10
FLEXURAL MODULUS	MPA	ISO 178	1400
NOTCHED IZOD IMPACT (@23°c)	KJ/M2	ISO 180/1A	4.5
ROCKWELL HARDNESS	R SCALE	ASTM D785	100
HDT (0.46N/mm2)	°C	ISO 75/B	85
VICAT SOFTENING POINT (10N)	°C	ISO 306A	154
MELTING POINT(DSC)	°C	ISO 11357-1	163

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EPC PP225
Polypropylen

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EPCPP225 is homopolymer grade with isotactic degree around 94% in form of powder without stabilizers. This grade has low molecular weight with good fluidity.

Applications:
General coating applications.

Property	Unit	Test Method	Typical Value
MFI (@230°C &2.16KG)	GR/10MIN	ISO1133	22
DENSITY	GR/CM3	ASTM D1505	0.9
ISOTACTIC DEGREE	%	ISO 9113	>=94
ASH CONTENT	PPM(WT)	ISO 3451-1	<=350
CHLORINE CONTENT	PPM(WT)	ENCO METHOD	<=100
VOLATILE CONTENT	%WT	ENCO METHOD	<=0.2
BULK DENSITY	GR/CM3	ASTM D1895	0.43
TENSILE STRENGTH AT YEILD (50mm/min)	MPA	ISO 527	33
ELONGATION AT YEILD (50mm/min)	%	ISO 527	9
FLEXURAL MODULUS	MPA	ISO 178	1450
NOTCHED IZOD IMPACT (@23°c)	KJ/M2	ISO 180/1A	3
ROCKWELL HARDNESS	R SCALE	ASTM D785	100
HDT (0.46N/mm2)	°C	ISO 75/B	85
VICAT SOFTENING POINT (10N)	°C	ISO 306A	154
MELTING POINT (DSC)	°C	ISO 11357-1	163

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EPC PP225Y
Polypropylen

EPCPP225Y is homopolymer grade with isotactic degree around 94% in form of powder without stabilizers. This grade low molecular weight with good fluidity.

Applications:
Good spun bond process and stretch ability. Used for staple fiber, diaper, sanitary towel, master batch, and injection molding.

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Physical and Mechanical Properties

Property	Unit	Test Method	Typical Value
MFI (@230°C &2.16KG)	GR/10MIN	ISO1133	22
DENSITY	GR/CM3	ASTM D1505	0.9
ISOTACTIC DEGREE	%	ISO 9113	>=94
ASH CONTENT	PPM(WT)	ISO 3451-1	<=350
CHLORINE CONTENT	PPM(WT)	ENCO METHOD	<=100
VOLATILE CONTENT	%WT	ENCO METHOD	<=0.2
BULK DENSITY	GR/CM3	ASTM D1895	0.43
TENSILE STRENGTH AT YEILD(50mm/min)	MPA	ISO 527	33
ELONGATION AT YEILD(50mm/min)	%	ISO 527	9
FLEXURAL MODULUS	MPA	ISO 178	1450
NOTCHED IZOD IMPACT(@23°c)	KJ/M2	ISO 180/1A	3
ROCKWELL HARDNESS	R SCALE	ASTM D785	100
HDT(0.46N/mm2)	°C	ISO 75/B	85
VICAT SOFTENING POINT (10N)	°C	ISO 306A	154
MELTING POINT(DSC)	°C	ISO 11357-1	163

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