



# SOCAR POLYMER

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Product Portfolio



SOCAR Polymer is the first public-private partnership in Azerbaijan's oil and gas sector. The company is a resident of the Sumgait Chemical Industry Park (SCIP).

At the end of 2020, SOCAR Polymer is the leader in non-resource exports of the Republic of Azerbaijan, continuously expanding the range of products and forming new opportunities for the development of polymer processing around its production site.



# Product Portfolio

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## Production Site

SOCAR Polymer production site for manufacturing of polyolefins contains two polymer production units with all the relevant infrastructure: Polypropylene production Unit, based on Spheripol Process by LyondellBasell, with a capacity of 184 000 tons/year and High-Density Polyethylene production Unit, based on Innovene S Technology by INEOS, with a capacity of 120 000 tons/year.

SOCAR Polymer products are used to produce rigid and flexible packaging, various types of textiles, household goods, and for production of pressure pipes for gas and water, industrial packaging and various types of films.



# Polypropylene

## General Nomenclature Key

<b>C</b>	<b>A 04</b>	<b>40</b>	<b>EX</b>
<b>R</b>	<b>B 35</b>	<b>45</b>	<b>MO</b>
<b>H</b>	<b>B 03</b>	<b>42</b>	<b>TF</b>

Type of polymer – PP-H, -R, -C

Melt Flow Rate Identifier

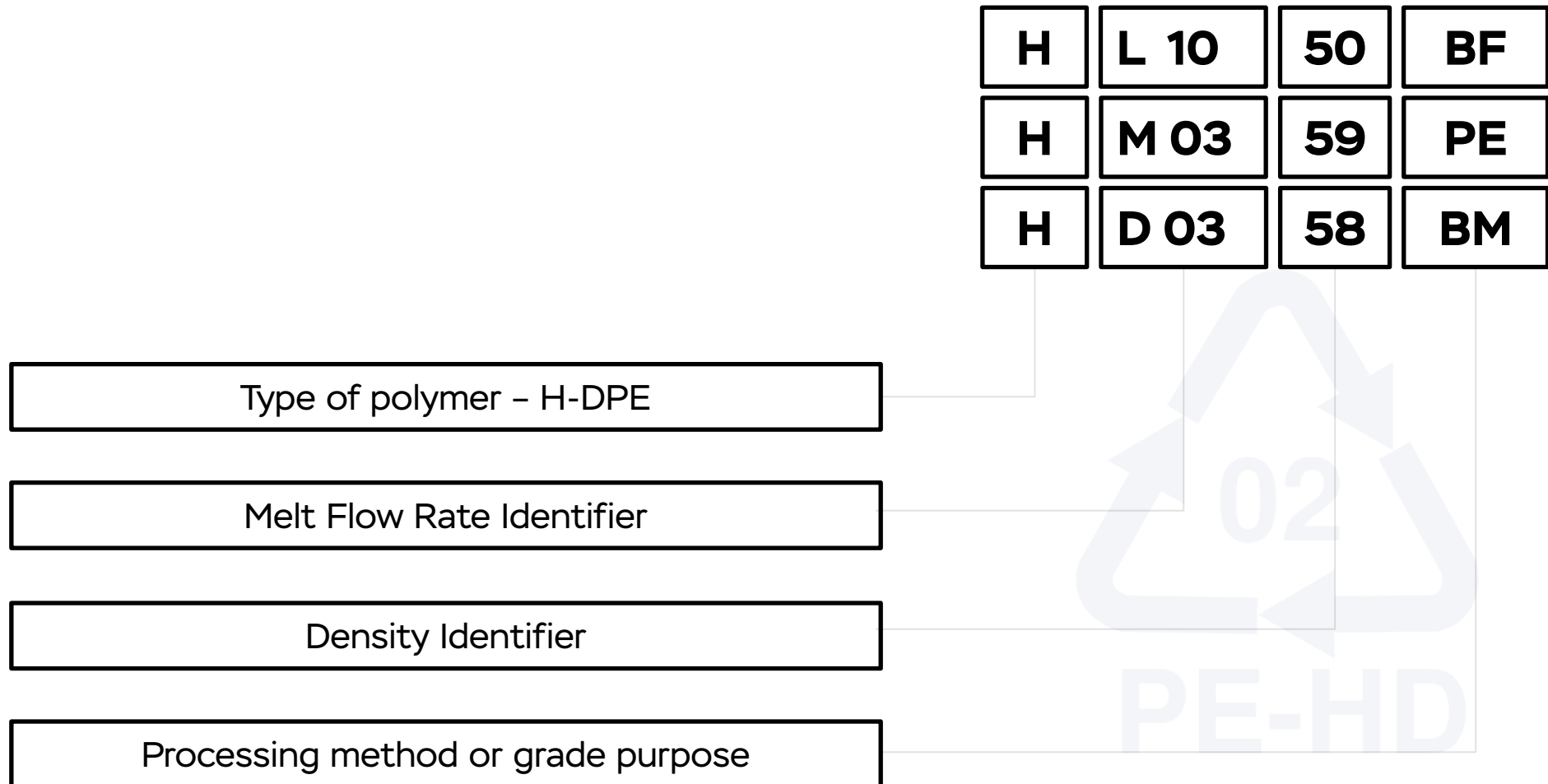
Specific code (type of recipe, additives)

Processing method or grade purpose



# Polyethylene

## General Nomenclature Key





# General Purpose / Homopolymers

Grade name	Type of polymer	MFR, g/10 min	Flexural Modulus, MPa	MWD	Key additives	Applications
HA0700GP	PP-H	0.7	1500	Wide	Basic recipe	Pipe & Sheet Extrusion
HB0100GP	PP-H	1.0	1500	Wide	Basic recipe	Pipe & Sheet Extrusion
HB0200GP	PP-H	2.0	1500	Narrow	Basic recipe	Injection Molding / Caps & Closures
HB0300GP	PP-H	3.0	1500	Medium	Basic recipe	Injection Molding / Extrusion
HB0400GP	PP-H	4.0	1500	Medium	Basic recipe	Injection Molding / Extrusion
HB0600GP	PP-H	6.0	1500	Medium	Basic recipe	Injection Molding / Extrusion
HB0900GP	PP-H	9.0	1500	Medium	Basic recipe	Injection Molding / Extrusion
HB1200GP	PP-H	12	1500	Medium	Basic recipe	Injection Molding / Compounding
HB1800GP	PP-H	18	1500	Medium	Basic recipe	Injection Molding / Compounding
HB2500GP	PP-H	25	1500	Medium	Basic recipe	Injection Molding / Lamination
HB3500GP	PP-H	35	1500	Medium	Basic recipe	Injection Molding / TWIM
HB4500GP	PP-H	45	1500	Medium	Basic recipe	Injection Molding / TWIM
HB6500GP	PP-H	65	1500	Narrow	Basic recipe	Injection Molding / TWIM

Test methods:  
Melt Flow Rate according ISO1133:  
PP MFR at 230°C/2.16 kg

# Injection and Compression Molding

Grade name	Type of polymer	MFR, g/10 min	Flexural Modulus, MPa	MWD	Key additives	Applications
HB0245CM	PP-H	2.0	1600	Narrow	Slip agent	Compression Molding
CB0645CM	PP-C	6.0	1400	Medium	Slip agent	Compression Molding
CB0900MO	PP-C	9.0	1100	Medium	Basic recipe	Injection Molding / Compounding
CB1200MO	PP-C	12	1100	Medium	Basic recipe	Injection Molding / Compounding
CB1600MO	PP-C	16	1100	Medium	Basic recipe	Injection Molding / Compounding
CB1640MO	PP-C	16	1400	Medium	Nucleator	Good stiffness-impact balance
CB1648MO	PP-C	16	1450	Medium	Nucleator / Antistatic	Good stiffness-impact balance
CB2200MO	PP-C	22	1100	Medium	Basic recipe	Injection Molding / Compounding
CB2240MO	PP-C	22	1400	Medium	Nucleator	Good stiffness-impact balance
CB2248MO	PP-C	22	1450	Medium	Nucleator / Antistatic	Good stiffness-impact balance
RB2541MO	PP-R	25	1100	Narrow	Clarifier	Good Transparency / Syringes

Test methods:  
Melt Flow Rate according ISO1133:  
PP MFR at 230°C/2.16 kg  
HDPE MFR at 190°C/2.16 kg



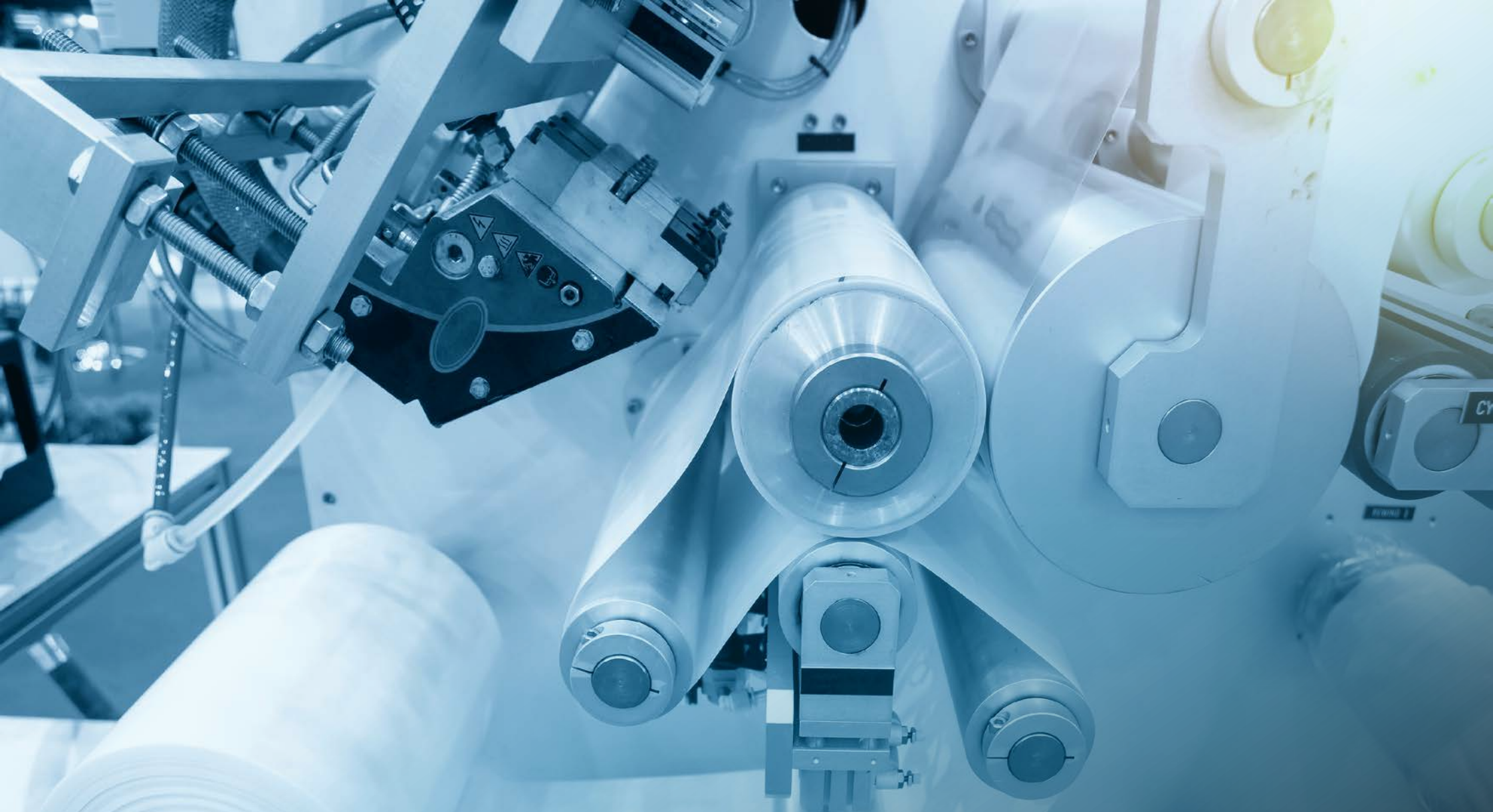
## Thin Wall Injection Molding



# Thin Wall Injection Molding

Grade name	Type of polymer	MFR, g/10 min	Flexural Modulus, MPa	MWD	Key additives	Applications
HB4540MO	PP-H	45	2100	Medium	Nucleator	Rigid Packaging Molding / Polystyrene replacement
HB5545MO	PP-H	55	1800	Narrow	Nucleator / Antistatic / Slip Agent	Rigid Packaging Molding / Improved fluidity
HB6540MO	PP-H	65	2100	Medium	Nucleator	Rigid Packaging Molding / Polystyrene replacement
RB3545MO	PP-R	35	1000	Narrow	Clarifier / Antistatic / Slip Agent	Transparent Packaging Molding / Improved impact properties
RB4545MO	PP-R	45	1100	Narrow	Clarifier / Antistatic / Slip Agent	Transparent Packaging Molding / Shorter cycle times
RB4548MO	PP-R	45	1100	Narrow	Clarifier / Antistatic	Transparent Packaging Molding / Lower migration
RB6545MO	PP-R	65	1100	Narrow	Clarifier / Antistatic / Slip Agent	Transparent Packaging Molding / Shorter cycle times
CB3648MO	PP-C	36	1450	Medium	Nucleator / Antistatic	Rigid Packaging Molding / Good stiffness-impact balance
CB4848MO	PP-C	48	1450	Medium	Nucleator / Antistatic	Rigid Packaging Molding / Good stiffness-impact balance
CB6448MO	PP-C	64	1450	Medium	Nucleator / Antistatic	Rigid Packaging Molding / Good stiffness-impact balance

Test methods:  
Melt Flow Rate according ISO1133:  
PP MFR at 230°C/2.16 kg



# Films



# Films

Grade name	Type of polymer	MFR, g/10 min	Flexural Modulus, MPa	MWD	Key additives	Applications
RB0210BF	PP-R	1.8	950	Wide	Basic recipe	Blown Film
HB0322BF	PP-H	3.0	1500	Wide	Stearate-Free	BOPP-Film / Metallizable
HB0910CF	PP-H	9.0	1500	Narrow	Basic recipe	CPP-Film
HB0912CF	PP-H	9.0	1500	Narrow	Stearate-Free	CPP-Film / Metallizable
HB0915CF	PP-H	9.0	1500	Narrow	Slip Agent / Antiblock	CPP-Film
RB0910CF	PP-R	9.0	1100	Narrow	Basic recipe	CPP-Film
RB0915CF	PP-R	9.0	1100	Narrow	Slip Agent / Antiblock	CPP-Film
HL1050BF	PE-HD	10 (HLMI - ПТР@21.6)		Bimodal	Basic recipe	Thin Blown Film / Carrying out bags
HL1652BF	PE-HD	16 (HLMI - ПТР@21.6)		Bimodal	Basic recipe	Thin Blown Film / Counter bags

Test methods:  
Melt Flow Rate according ISO1133:  
PP MFR at 230°C/2.16 kg  
HDPE MFR (HLMI) at 190°C/21.6 kg



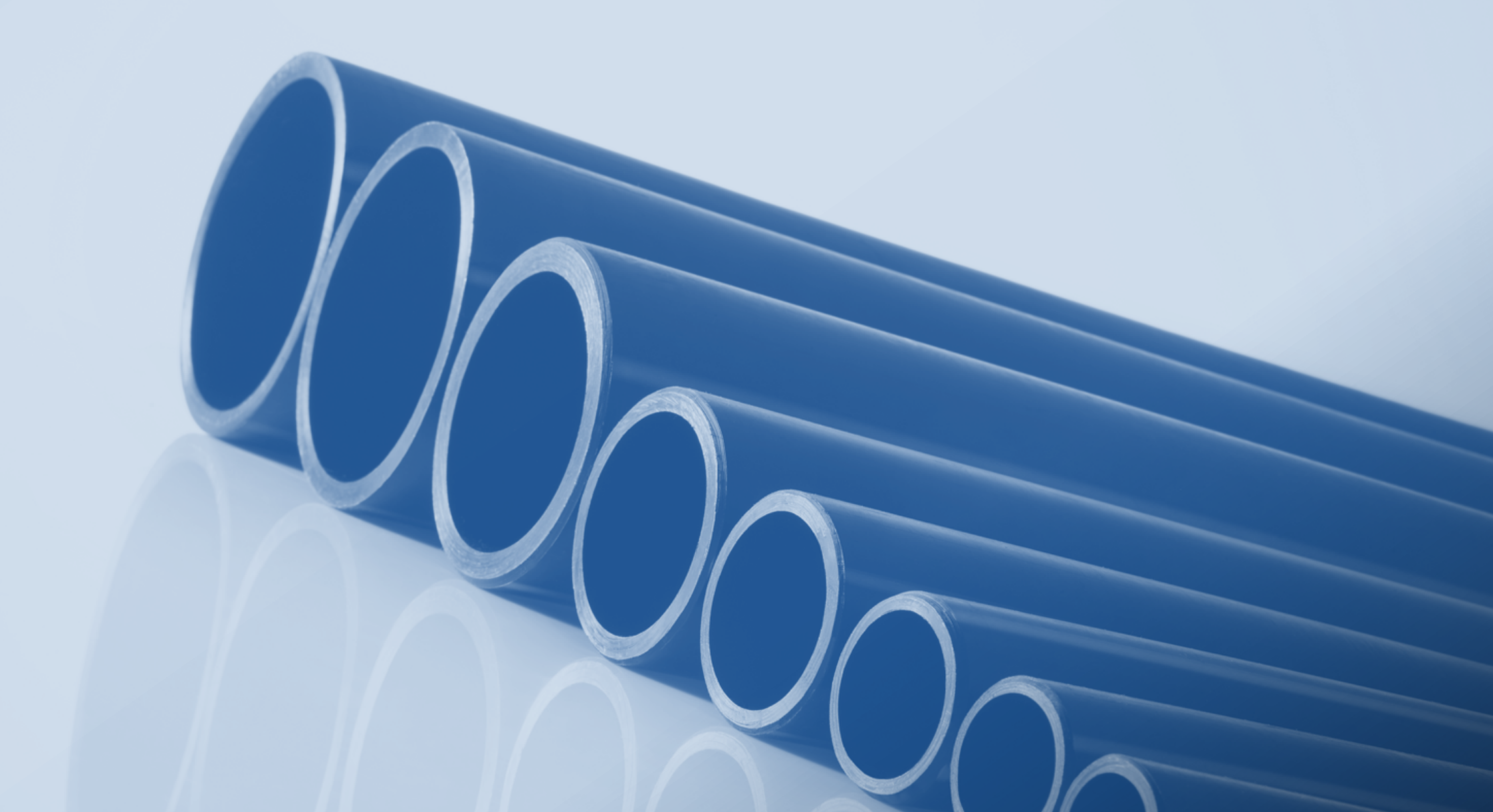


## Fibers and Nonwovens

# Fibers and Nonwovens

Grade name	Type of polymer	MFR, g/10 min	Flexural Modulus, MPa	MWD	Key additives	Applications
HB2552FC	PP-H	25	1400	Narrow	AGF	Continuous filaments / Carpet yarns
HB2652FC	PP-H	25	1400	Medium	AGF	Continuous filaments / Carpet yarns
HB2659FC	PP-H	26	1400	Narrow	AGF / UV / Phenol-Free	Continuous filaments / Spunbond / Carpet yarns
HB2662FS	PP-H	26	1200	Very narrow	AGF	Spunbond / Conventional MFR
HB3659FC	PP-H	26	1400	Narrow	AGF / UV / Phenol-Free	Continuous filaments / Spunbond
HB3662FS	PP-H	36	1200	Very narrow	AGF	Spunbond / High MFR
HF0862FM	PP-H	800	--	Ultra narrow	AGF	Meltblown / Spunmelt / Masks Respirators, Filters
HF1262FM	PP-H	1200	--	Ultra narrow	AGF	Meltblown / Spunmelt / Masks Respirators, Filters
HF1562FM	PP-H	1500	--	Ultra narrow	AGF	Meltblown / Spunmelt / Masks Respirators, Filters

Test methods:  
Melt Flow Rate according ISO1133:  
PP MFR at 230°C/2.16 kg



# Pipes





# Pipes

Grade name	Type of polymer	MFR, g/10 min	Flexural Modulus, MPa	MWD	Key additives	Applications
HM0159LS	PE-HD black	0.15	950	Bimodal	Carbon black	Large diameter Pressure pipes/ 1600+ / Black / Low sagging
HM0259LS	PE-HD black	0.25	950	Bimodal	Carbon black	Large diameter Pressure pipes/ 1420+ / Black / Low sagging
HM0349PE	PE-HD natural	0.30	950	Bimodal	AO <sup>2</sup>	Multilayer pipes/ Fittings
HM0359PE (MRS10)	PE-100 black	0.30	950	Bimodal	Carbon black	PE100 Pressure pipes/ Black / Gas / Water
HM0359RC	PE-HD black	0.30	950	Bimodal	Carbon black	Pressure pipes / Black / Crack Resistance
HM0452EX	PE-HD natural	0.40	1100	Bimodal	Basic recipe	General Purpose: Pipes / Sheets / Films
HM0552EX	PE-HD natural	0.50	1100	Bimodal	Basic recipe	Non-Pressure / Spiral welded / Sewage pipes
HM0652EX	PE-HD natural	0.60	1100	Bimodal	Basic recipe	Irrigation and corrugated tubes
RA0342EX	PP-R	0.30	850	Wide	LTTS <sup>1</sup>	Pressure pipes / Cold & Hot Water Indoor Apps
CA0342EX	PP-C	0.30	1250	Wide	LTTS <sup>1</sup>	Non-Pressure / Sewage pipes
CA0440EX	PP-C	0.40	1400	Wide	Nucleator	Non-Pressure / Sewage pipes

Test methods:  
Melt Flow Rate according ISO1133:  
PP MFR at 230°C/2.16 kg  
HDPE MFR at 190°C/5.0 kg

Note:  
1 - LTTS - Long Term Thermostabilizer;  
2 - High content of antioxidants



## Extrusion and Thermoforming

# Extrusion and Thermoforming

Grade name	Type of polymer	MFR, g/10 min	Flexural Modulus, MPa	MWD	Key additives	Applications
CA0540EX	PP-C	0.5	1400	Wide	Nucleator	Pipe & Sheet Extrusion
CA0700EX	PP-C	0.7	1100	Wide	Basic recipe	Pipe & Sheet Extrusion
CA0900BM	PP-C	0.9	1100	Wide	Basic recipe	Pipe & Sheet / Blow Molding
CB0120BM	PP-C	1.3	1100	Wide	Basic recipe	Sheets / Blow Molding
CB0140BM	PP-C	1.3	1400	Wide	Nucleator	Sheets / High rigidity
HB0256FR	PP-H	2.0	1500	Wide	Stearate-Free	Raffia / High Load / Injection Molding
HB0356FR	PP-H	3.0	1500	Wide	Stearate-Free	Raffia / Standard / Injection Molding
HB0456FR	PP-H	4.0	1150	Wide	Stearate-Free	Raffia / High Speed Lines
HB0556FR	PP-H	5.0	1150	Wide	Stearate-Free	Raffia / Very High-Speed Lines
HB0656FR	PP-H	6.0	1150	Wide	Stearate-Free	Raffia / Very High-Speed Lines
HB0342TF	PP-H	3.0	1800	Wide	Nucleator	Thermoforming / Injection Molding

Test methods:  
Melt Flow Rate according ISO1133:  
PP MFR at 230°C/2.16 kg



## Blow Molding



# Blow Molding

Grade name	Type of polymer	MFR, g/10 min	Flexural Modulus, MPa	MWD	Key additives	Applications
RB0240BM	PP-R	1.8	900	Wide	Clarifier	Small Blow Molding/ Transparent / Shampoo
RB0270BM	PP-R	1.8	900	Wide	LE <sup>1</sup>	Small Blow Molding/ Medical
CA0900BM	PP-C	0.9	1100	Wide	Basic	Small Blow Molding/ Detergents / Automotive
CB0120BM	PP-C	1.3	1100	Wide	Basic	Small Blow Molding/ Detergents / General Purpose
HD0152BM	PE-HD	0.1	1050	Bimodal	Basic	Medium Blow Molding/ 30-60 l / High ESCR
HD0256BM	PE-HD	0.2	1100	Bimodal	Basic	Medium Blow Molding/ Jerry Cans 20-60 l. / Oils
HD0358BM	PE-HD	0.3	1150	Bimodal	Basic	Small Blow Molding/ 5-20 l / Detergents
HD0862BM	PE-HD	0.8	1350	Bimodal	LE <sup>1</sup>	Very Small Blow Molding/ 0.1-1.0 l / Milk
HL1052BM	PE-HD	10 (HLMl)*	1150	Bimodal	UV	Large Blow Molding / Drums 220 l / High ESCR
HLO648BM	PE-HD	6 (HLMl)*	1000	Bimodal	UV	Very Large Blow Molding / > 200 l / High ESCR

Test methods:  
Melt Flow Rate according ISO1133:  
PP MFR at 230°C/2.16 kg  
HDPE MFR at 190°C/2.16 kg and \* MFR (HLMl) at 190°C/21.6 kg

Note:  
1 - Extraction resistant antioxidant

### Mühüm məqamlar Key highlights

İstənilən məqam / Milestone	2019	2020
İstehsalatın başlanması / Production start	2019-cü ilin sonuna qədər / By the end of 2019	2020-ci ilin sonuna qədər / By the end of 2020
İstehsalatın başlanması / Production start	2019-cü ilin sonuna qədər / By the end of 2019	2020-ci ilin sonuna qədər / By the end of 2020
İstehsalatın başlanması / Production start	2019-cü ilin sonuna qədər / By the end of 2019	2020-ci ilin sonuna qədər / By the end of 2020
İstehsalatın başlanması / Production start	2019-cü ilin sonuna qədər / By the end of 2019	2020-ci ilin sonuna qədər / By the end of 2020
İstehsalatın başlanması / Production start	2019-cü ilin sonuna qədər / By the end of 2019	2020-ci ilin sonuna qədər / By the end of 2020

### Layihənin əsaslandırılması Project Rationale

Yəqinlik / Certainty

İstehsalatın başlanması / Production start

İstehsalatın başlanması / Production start



**SOCAR  
POLYMER**

[www.socarpolymer.az](http://www.socarpolymer.az)

### Layihənin statusu Project progress status

Bölmələr / Bölmələr / Divisions / Divisions	Kəmiyyət / Proqram / Quantity / Program
Detallı mühəndislik / Detailed Engineering	68.4%
Sistemlərin sifarişləri / Procurement Orders	73.4%
Subpozaçı sifarişləri / Subcontracting	95.0%
Müalicə təchizatı — Təchizat və yeridirmə / Material Supply — Manufacturing and Delivery	15.8%
Tikinti / Construction	5.7%

## AZERBAIJAN SHIPPING COMPANY



## AZERBAIJAN CASPIAN SHIPPING COMPANY

AMS

AZERBAIJAN

# Sales and Customer Support



## **SOCAR Marketing & Operations**

Domestic, Regional and Worldwide Sales Office

Sales in Azerbaijan, Georgia, Turkey, China, and European and Asian Markets

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## **SOCAR Polymer LLC**

Production site and back office

Technical and Sales Support

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## **SOCAR RUS LLC**

Russian Sales Office

Sales in Russia and the countries of Eurasian Customs Union (Belarus, Kazakhstan, Kyrgyzstan)





### **SOCAR Marketing & Operations**

Baku, Azerbaijan  
Sabit Orujov street, 28,  
AZ 1025

E-mail: [petrochemicals@socar.az](mailto:petrochemicals@socar.az)

Phone: +994 12 521 04 84

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### **SOCAR Polymer LLC**

Sumgait, Azerbaijan  
Samad Vurgun street, 1183  
AZ5000

E-mail: [sales@socarpolymer.az](mailto:sales@socarpolymer.az)

Phone: +994 12 404 53 30

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### **SOCAR RUS LLC**

121151, Russia, Moscow  
Mozhayskiy Val street,  
building 8, block D, floor 9  
E-mail: [polymers@socar.com.ru](mailto:polymers@socar.com.ru)  
Phone: +7 499 502 88 88

