



# INEOS Polyolefins, your partner in extrusion blow moulding

Extrusion blow moulding involves the production of thin walled hollow articles with capacities ranging from less than 10ml to more than 10,000L. Most commonly it is used in the production of bottles and containers for the consumer and industrial packaging market.

## INEOS Polyolefins: a global leader in extrusion blow moulding

INEOS Polyolefins manufactures and markets Polypropylene and Polyethylene and is in the top three producers in both Europe and the world. It offers a full range of polyolefin materials for the pipes, packaging, automotive and niche segments. With a market segment approach it provides dedicated sales, marketing & technical teams focused on delivering differentiated levels of quality and service.

As a result of its leading technology, strong product development capability and willingness to create value and strong relationships with customers and end-users INEOS Polyolefins is committed to serve the current and future needs of the global extrusion blow moulding market. Whether you are producing high clarity bottles for cosmetic applications, a high volume detergent bottles or large containers for packaging of hazardous chemicals, INEOS Polyolefins has a leading grade to exactly meet your requirements.



Offering much more than a product, offering you solutions!

**INEOS** Polyolefins



## 1. HIGH DENSITY POLYETHYLENE

INEOS Polyolefins operates state of the art proprietary production facilities using a range of catalyst systems to produce leading grades specifically tailored for the all end used applications.

- Medium molecular weight homopolymer grades with high levels of rigidity for the packaging of liquid foods and non-aggressive liquids and creams.
- Medium molecular weight copolymer grades with levels of environmental stress crack resistance to meet the most demanding end use applications.
- High molecular weight copolymer grades with class leading impact / environmental stress crack performance for packaging of industrial chemicals and the production of large chemical storage tanks and containers.

### A. Medium molecular weight grade range

Grade	MFR 190°C/2.16kg (g/10min)	Density annealed (kg/m <sup>3</sup> )	FNCT 9MPa/50°C	Application and key characteristics
HD6007S	0,6	964	0,3	High rigidity application homopolymer grade for fresh milk and non-aggressive chemicals
HD5502S	0,2	955	1,5	General purpose grade with exceptional levels of impact performance
HD5502G	0,24	955	5	General purpose grade with exceptional levels of environmental stress crack resistance
HD5802G	0,24	959	3	High rigidity grade with high level of environmental stress crack resistance especially suited to detergent packaging
HD4820EA	2	950	1	Specially formulated grade for exceptional levels of gloss

### B. High molecular weight grade range

Grade	MFR 190°C/21.6 kg (g/10min)	Density annealed (kg/m <sup>3</sup> )	FNCT 9MPa/50°C	Application and key characteristics
HM5411EA	10	952	15	General purpose grade with high impact and environmental stress crack resistance ideal for 1-25L containers
HM5060XA	6	950	25	Very high levels of impact and environmental stress crack resistance specifically tailored for 25L container production
HM4560UA	6	949	40	Exceptional levels of impact and environmental stress crack resistance + UV stability ideal for IBC and large tank production



## 2. POLYPROPYLENE

INEOS Polyolefins operates 4 production technologies on seven reactors based on 5 sites across Europe. This broad base enables optimisation of production without compromising material properties. This coupled with detailed process and product development has given rise to a broad grade range with leading edge products for all mainstream applications.

- Homopolymer grades for maximum stiffness, excellent hot fill characteristics and good contact clarity and surface gloss.
- Random copolymer grades for very good or outstanding clarity and surface gloss all with good levels of rigidity and impact resistance.
- Block or impact copolymer grades with excellent impact and chemical resistance with good levels of rigidity.

### A. Homopolymer grade range

Grade	MFR 230°C/2.16kg (g/10min)	Flexural modulus (MPa)	Application and key characteristics
100-GA01	0,9	1550	Very high rigidity coupled with excellent melt strength makes this grade ideal for the production of larger containers
100-GA02	2	1450	Outstanding processing stability and good parison strength makes this grade ideal for small containers requiring good contact clarity
150-GA02	2	1450	Outstanding processing stability and good parison strength makes this grade ideal for small containers requiring good contact clarity

### B. Random copolymer grade range

Grade	MFR 230°C/2.16kg (g/10min)	Flexural modulus (MPa)	Izod impact 23°C (kJ/m <sup>2</sup> )	Application and key characteristics
200-CA02	1,7	950	14	Clarified and antistatic grade offering outstanding clarity for the production of small to medium sized bottles
200-GA02	2	950	10	GP grade with a good balance of processing and mechanical properties ideal for small bottle production
200-NA02	2	1000	10	Clarified grade offering excellent clarity for the production of small to medium sized bottles
201-GB02	2	1000	8	High heat resistance with good clarity makes it ideal for various hot fill bottle applications



### C. Impact copolymer grade range

Grade	MFR 230°C/2.16kg (g/10min)	Flexural modulus (MPa)	Izod impact -20°C (kg/m <sup>2</sup> )	Application and key characteristics
330-NA00	0,3	1550	7	Very high rigidity coupled with very good impact resistance and melt strength make it ideal for medium to large containers
433-NA00	0,3	1350	7	High rigidity coupled with very good impact resistance and melt strength make it ideal for medium to large containers
400-NA01	1,5	1300	7,5	Excellent impact strength coupled with good melt strength makes this grade ideal for small to medium sized bottles
400-GA03	2,5	1250	7	GP grade with excellent processing characteristics specifically

### 3. LOW DENSITY AND LINEAR LOW DENSITY POLYETHYLENE

In addition, INEOS Polyolefins has a limited range of Low Density Polyethylene (LDPE) and linear Low Density Polyethylene (LLDPE) grades suitable for extrusion blow moulding. For details of these, along with technical datasheets for all grades listed above please visit our web site ([www.ineos.com](http://www.ineos.com)).

### Contact :

For further details on any of the information contained in this folder, please contact your local INEOS Polyolefins Account Manager.

You can also have a look at our website:

[www.ineos.com](http://www.ineos.com)



INEOS Polyolefins  
Rue de Ransbeek 310  
B-1120 Brussels

#### Belgium

Tel : +32 2 264 38 08

Fax: +32 2 264 38 18

e-mail: [IneosPolyolefinsEu@innovene.com](mailto:IneosPolyolefinsEu@innovene.com)

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