

STRONG+ CONSISTENT

SABIC® HDPE CC860V HELPING YOU PROTECT THE PUREST



CHEMISTRY THAT MATTERS

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SABIC[®] HDPE CC860V is a tailor-made injection molding grade for the Caps & Closures (C&C) segment for still water, that meets the stringent organoleptic properties requirements demanded from the industry. The most important requirements for materials used in water packaging – organoleptic properties – ensure the original high quality of the water.

THE ORGANOLEPTIC IMPORTANCE OF CAPS AND CLOSURES

- When enjoying food and drink, our tongue, nasal and mouth cavity trigger our senses of taste and smell.
- People think that water that tastes 'off' is not pure and they associate it with potential health and safety risks. This is one of the reasons why high requirements are set for water packaging materials. The packaging should not affect the quality or taste of the water.
- The organoleptic properties for packaging material are based on measuring the above mentioned sensations (taste and smell). These properties are commonly tested by a human panel or 'jury', as mechanical tools cannot yet quantify them. In addition, VOC (Volatile Organic Compounds) measurement gives a good indication of the material's purity.
- Organoleptic property consistency can be achieved through the strict control of the relevant manufacturing conditions.
- Organoleptic properties are qualitycontrolled by an external laboratory.

MEETING YOUR NEEDS

- In addition to the trend for high speed injection molding and lightweighting, the C&C industry is moving towards high quality packaging, and organoleptic properties help consumers feel reassured of the high purity of water.
- The lifestyle of today's consumers is continually changing; more and more consumers want their everyday products to be conveniently packaged.
- Our current 'on-the-go' lifestyle requires lightweight products that are easy to use and re-use. This has led to smaller, more convenient packaging that can be used at any time and any place.
- To meet these trends, SABIC's Caps & Closures portfolio is tailored to smart packaging, secure sealing and easy dispensing.
- SABIC's portfolio is designed for optimized cap design and processing in term of energy consumption and faster cycle time. It is also optimized for life-time and end-of-life.
- With our broad portfolio we want to help you to select the best material possible for your application.

KEY ADVANTAGES OF SABIC[®] HDPE CC860V

- Especially designed for the production of still water caps.
- Meets the triangular test, NF V09-013 organoleptic requirement.
- Very low level of VOC (EPA 524.2 protocols rev. 3 & rev. 4.1).
- Easy processing, good thermal stability.
- Good ESCR (Environmental Stress Cracking Resistance) and impact strength.
- Consistency.
- · Low warpage.

Whether you are looking for excellent organoleptic properties that protect the original taste of still water or other properties such as ESCR for carbonated soft drinks, you can find what you need in SABIC's extended HDPE Caps & Closures portfolio. In addition to our SABIC® HDPE portfolio we also offer LDPE, LLDPE and PP grades specifically suited to Caps & Closures applications. When it comes to Caps & Closures SABIC is your partner with a broad range of innovative and competitive solutions.

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 Europe as referred to herein means any legal entity belonging to the SABIC Europe group of companies.

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SABIC C&C PORTFOLIO

HDPE ORGANOLEPTIC

GRADES	DENSITY (kg/m ³)	MFR (g/10 min)	APPLICATIONS
CC252	952	2.2	Carbonated drinks
CC252SL	952	2.2	Carbonated drinks, lubricated
CC453	953	4	Slightly carbonated drinks, tea and juices
CC453SL	953	4	Slightly carbonated drinks, tea and juices, lubricated
CC860V	960	8	Still water low volatiles
CC862	962	8	Still water
CC1053	953	10	Still water
HDPE NON OR	GANO		
GRADES	DENSITY (kg/m ³)	MFR (g/10 min)	APPLICATIONS
B5933	959	0,35	Carbonated drinks, compression moulding process
B6246LS	962	0.5	UN closures, chemicals
M40053	953	4.7	Chemicals, slightly carbonated drinks, tea and juices
M40053S	953	4	Chemicals, slightly carbonated drinks, tea and juices
M80064	964	8	Edible oil, overcaps
M100053	953	10	Edible oil, overcaps
M200056	956	20	Milk, cosmetics overcaps
CC3054	954	30	Milk, cosmetics overcaps
LDPE			
GRADES	DENSITY (kg/m ³)	MFR (g/10 min)	APPLICATIONS
2008TN00	920	7.5	Glass bottle lids, sport caps, spouts
2308TN00	924	7.5	Glass bottle lids, sport caps, spouts
1922SF	919	22	HOD water, caps
1965T	919	65	HOD water, caps
LDPE			
GRADES	DENSITY (kg/m ³)	MFR (g/10 min)	APPLICATIONS
M200024	924	20	Glass bottle lids, caps, spouts
M500026	926	50	Glass bottle lids, caps, spouts

HDPE PHARMACOPEA

GRADES	DENSITY (kg/m ³)	MFR (g/10 min)	APPLICATIONS
PCG40053	953	4.7	Closures
PCG80064	964	8	Closures, devices
PCG300054	954	30	Closures, devices

LDPE PHARMACOPEA

GRADES	DENSITY (kg/m ³)	MFR (g/10 min)	APPLICATIONS
PCG07	920	7.5	Closures, glass bottle lids, caps, spouts
PCG09	924	7.5	Closures, glass bottle lids, caps, spouts
PCG22	919	22	Closures, glass bottle lids, caps, spouts

HOMOPOLYMER PP

GRADES	MELT FLOW RATE ISO 1133 (g/10 min)	FLEXURAL MODULUS ASTM D790 (N/mm ²)	IZOD NOTCHED IMPACT 23°C, ISO 180 (kJ/m²)	IZOD NOTCHED IMPACT 0°C, ISO 180 (kJ/m²)	FORMULATION*	TYPICAL APPLICATIONS/ PROPERTIES
525P	3	1500	3.4			Hinged caps
527K	3	2250	3.0		CI, AS	Clarified hinged caps
571P	5.7	1800	3			General purpose (hinged caps)
575P	10.5	1800	2			General purpose (hinged caps, deodorant balls)
522L	10.5	1800	2		SA	Hinged caps (low opening force)
576P(/S)	19	1900	2.5		CR (AS)	General purpose (hinged caps, pump parts)
578N	25	2100	2.5		CR, N	High stiffness caps
578L	25	1750	2.5		SA	Hinged caps (low opening force & scratch resistant)
579S	47	1900	2		CR, AS	Wide mouth and detergent caps
FPH50 Flowpact	50	2100	2		N, AS	Wide mouth and detergent caps

RANDOM PP

GRADES	MELT FLOW RATE ISO 1133 (g/10 min)	FLEXURAL MODULUS ASTM D790 (N/mm ²)	IZOD NOTCHED IMPACT 23°C, ISO 180 (kJ/m²)	IZOD NOTCHED IMPACT 0°C, ISO 180 (kJ/m²)	FORMULATION*	TYPICAL APPLICATIONS/ PROPERTIES
670Kh	11	1150	6.5	2.0	CI	Hinged caps, lids
QR673K Qrystal	25	1250	5.5	2.5	CR, CI, AS	General purpose, improved transparency
RA12MN40	40	1200	4.5	2.2	CR, CI, AS	Overcaps, lids, cosmetic packaging
QR674K Qrystal	40	1250	4.7	2.5	CL, AS	Overcaps, lids, cosmetic packaging
QR675K Qrystal	60	1200	4.7	2.5	CR, CI, AS	Overcaps, lids, cosmetic packaging

MEDIUM IMPACT PP

GRADES	MELT FLOW RATE ISO 1133 (g/10 min)	FLEXURAL MODULUS ASTM D790 (N/mm ²)	IZOD NOTCHED IMPACT 23°C, ISO 180 (kJ/m ²)	IZOD NOTCHED IMPACT 0°C, ISO 180 (kJ/m²)	FORMULATION*	TYPICAL APPLICATIONS/ PROPERTIES
CPC04C Clearpact	4	1200	NB	4	CI, N, AS	Transparent compression molded caps
56M10	6.2	1550	10	5		General purpose (hinged caps)
48M10 (/40)	15	1650	7	4.5	(AS)	General purpose (hinged caps)
58MNK10	15	1650	10	5.7	CR, N	General purpose (short cycle)
PHC31	15	1350	10	5	CR	General purpose (child resistant closures)
CPC35C Clearpact	35	1150	7	4	CI, N, AS	Fast cycle, transparent/ no stress marks, high gloss
412MN40	37	1550	6	4	CR, N, AS	Spray through, wide mouth & hinged caps
512MN10	37	1400	7	4.5	CR, N	Spray through, wide mouth & hinged caps
FPC55 Flowpact	55	1550	7.5	5.5	CR, N	Spray through, wide mouth & hinged caps
513MNK40	70	1450	6.5	4	CR, N, AS	Thin walled caps

HIGH IMPACT PP

GRADES	MELT FLOW RATE ISO 1133 (g/10 min)	FLEXURAL MODULUS ASTM D790 (N/mm²)	IZOD NOTCHED IMPACT 23°C, ISO 180 (kJ/m ²)	IZOD NOTCHED IMPACT 0°C, ISO 180 (kJ/m²)	FORMULATION*	TYPICAL APPLICATIONS/ PROPERTIES
83MF10	1.8	1200	No break	17		Chemical & UN caps
PHC26	8	1350	No break	9		High impact resistant caps
PHC27	14	1200	No break	9		High impact resistant caps (Child resistant)