

# ALCUDIA® HDPE 5803

High Density Polyethylene  
REPSOL

Message:

ALCUDIA® 5803 is a bimodal high-density polyethylene with middle molecular weight. It is specially designed to make, by blow molding-extrusion, tanks for liquid detergents and chemicals. This grade contains stabilizers according to the end use of the item in order to reinforce the thermal stability. Good mechanical properties and good level of both stiffness and environmental stress cracking resistance can be obtained with ALCUDIA® 5803 due to its molecular weight and density.

TYPICAL APPLICATIONS

Packaging of liquid detergents and cleaners.  
Recommended melt temperature range from 180 to 200°C. Processing conditions should be optimised for each production line.

General Information			
Additive	Heat Stabilizer		
Features	Bimodal Molecular Weight Distribution		
	Food Contact Acceptable		
	Heat Stabilized		
	High ESCR (Stress Crack Resist.)		
	Medium Molecular Weight		
Uses	Blow Molding Applications		
	Packaging		
	Tanks		
Agency Ratings	EU Food Contact, Unspecified Rating		
Processing Method	Extrusion Blow Molding		
Physical	Nominal Value	Unit	Test Method
Density (23°C)	0.958	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR)			ISO 1133
190°C/2.16 kg	0.25	g/10 min	
190°C/21.6 kg	28	g/10 min	
190°C/5.0 kg	1.1	g/10 min	
Environmental Stress-Cracking Resistance (50°C, 10% Igepal, F50)	> 100	hr	ASTM D1693
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore D)	66		ISO 868
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress			ISO 527-2
Yield	30.0	MPa	
Break	30.0	MPa	
Tensile Strain (Break)	800	%	ISO 527-2
Flexural Modulus	1400	MPa	ISO 178

Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	128	°C	ISO 306/A
Extrusion	Nominal Value	Unit	
Melt Temperature	180 to 200	°C	

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

