# Arak LLDPE HD5218EA

## High Density Polyethylene

## Shazand (Arak) Petrochemical Corporation

#### Message:

HD5218EA is a high density polyethylene copolymer grade with a narrow molecular weight distribution, suitable for thin wall injection moulding applications.

Characteristics:

High flow.

High warpage resistance.

Suitable for fast cycling applications.

Typical applications are:

House wares.

Caps & closures.

Thin walled containers.

PET bottle bases.

\* HD5218EA is suitable for food contact.

Features  Copolymer Food Contact Acceptable High Flow Narrow Molecular Weight Distribution Vulcanizable  Uses  Bottles Caps Closures Household Goods Thin-walled Containers  Processing Method Injection Molding  Physical Nominal Value Unit Test Method Density 0.952 g/cm³ ASTM D2838  Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) 18 g/10 min ASTM D1238  Hardness Nominal Value Unit Test Method  Durometer Hardness (Shore D) 66 JASTM D2240  Mechanical Nominal Value Unit Test Method  Durometer Hardness (Shore D) 66 ASTM D2240  Mechanical Nominal Value Unit Test Method  Tensile Strength (Yield) 26.0 MPa ASTM D638 Flexural Modulus 1000 MPa ASTM D638 Flexural Modulus 1000 MPa ASTM D790 Impact Nominal Value Unit Test Method Charpy Notched Impact Strength 5.0 k/m² ASTM D796	General Information			
High Flow Narrow Molecular Weight Distribution Vulcanizable  Uses  Bottles Caps Closures Household Goods Thin-walled Containers  Processing Method Injection Molding  Physical Nominal Value Unit Test Method Density 0.952 g/cm³ ASTM D2838  Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) 18 g/10 min ASTM D1238 Hardness Nominal Value Unit Test Method Durometer Hardness (Shore D) 66 ASTM D2240  Mechanical Nominal Value Unit Test Method  Tensile Strength (Yield) 26.0 MPa ASTM D638 Tensile Elongation (Break) 1000 MPa ASTM D638 Flexural Modulus Inou MPa ASTM D790 Impact Nominal Value Unit Test Method	Features	Copolymer		
Narrow Molecular Weight Distribution Vulcanizable  Bottles Caps Closures Household Goods Thin-walled Containers  Processing Method Injection Molding  Physical Nominal Value Unit Test Method Density 0,952 g/cm³ ASTM D2838  Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) 18 g/10 min ASTM D1238  Hardness Nominal Value Unit Test Method Durometer Hardness (Shore D) 66 Unit Test Method  Durometer Hardness (Shore D) 66 Testing Unit Test Method  Tensile Strength (Yield) 26.0 MPa ASTM D638  Tensile Elongation (Break) 1000 % ASTM D638  Flexural Modulus 1000 MPa ASTM D790  Impact Nominal Value Unit Test Method		Food Contact Acceptable		
Uses Bottles Caps Closures Household Goods Thin-walled Containers  Processing Method Injection Molding  Physical Nominal Value Unit Test Method Density 0.952 g/cm² ASTM D2838  Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) 18 g/10 min ASTM D1238  Hardness Nominal Value Unit Test Method Durometer Hardness (Shore D) 66 ASTM D240  Mechanical Nominal Value Unit Test Method  Durometer Hardness (Shore D) 66 ASTM D240  Mechanical Nominal Value Unit Test Method  Tensile Strength (Yield) 26.0 MPa ASTM D638 Flexural Modulus 1000 MPa ASTM D790 Impact Nominal Value Unit Test Method		High Flow		
Uses Bottles Caps Closures Household Goods Thin-walled Containers  Processing Method Injection Molding  Physical Nominal Value Unit Test Method Density 0.952 g/cm³ ASTM D2838  Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) 18 g/10 min ASTM D1238  Hardness Nominal Value Unit Test Method Durometer Hardness (Shore D) 66		Narrow Molecular Weight Distribution		
Caps Closures Household Goods Thin-walled Containers  Processing Method Injection Molding  Physical Nominal Value Unit Test Method Density 0.952 g/cm³ ASTM D2838  Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) 18 g/10 min ASTM D1238  Hardness Nominal Value Unit Test Method  Durometer Hardness (Shore D) 66 ASTM D2240  Mechanical Nominal Value Unit Test Method  Tensile Strength (Yield) 26.0 MPa ASTM D638  Tensile Elongation (Break) 1000 MPa ASTM D790  Impact Nominal Value Unit Test Method		Vulcanizable		
Caps Closures Household Goods Thin-walled Containers  Processing Method Injection Molding  Physical Nominal Value Unit Test Method Density 0.952 g/cm³ ASTM D2838  Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) 18 g/10 min ASTM D1238  Hardness Nominal Value Unit Test Method  Durometer Hardness (Shore D) 66 ASTM D2240  Mechanical Nominal Value Unit Test Method  Tensile Strength (Yield) 26.0 MPa ASTM D638  Tensile Elongation (Break) 1000 MPa ASTM D790  Impact Nominal Value Unit Test Method				
Closures Household Goods Thin-walled Containers  Processing Method Injection Molding  Physical Nominal Value Unit Test Method Density 0,952 g/cm³ ASTM D2838  Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) 18 g/10 min ASTM D1238  Hardness Nominal Value Unit Test Method Durometer Hardness (Shore D) 66	Uses	Bottles		
Household Goods Thin-walled Containers  Processing Method Injection Molding  Physical Nominal Value Unit Test Method Density 0,952 8/Cm³ ASTM D2838  Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) 18 9/10 min ASTM D1238  Hardness Nominal Value Unit Test Method  Durometer Hardness (Shore D) 66 ASTM D2240  Mechanical Nominal Value Unit Test Method  Tensile Strength (Yield) 26.0 MPa ASTM D638  Tensile Elongation (Break) 1000 MPa ASTM D638  Flexural Modulus Nominal Value Unit Test Method		Caps		
Processing Method Injection Molding  Physical Nominal Value Unit Test Method Density 0.952 g/cm³ ASTM D2838  Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) 18 g/10 min ASTM D1238  Hardness Nominal Value Unit Test Method Durometer Hardness (Shore D) 66 ASTM D240  Mechanical Nominal Value Unit Test Method  Tensile Strength (Yield) 26.0 MPa ASTM D638  Tensile Elongation (Break) 1000 % ASTM D638  Flexural Modulus 1000 MPa ASTM D790  Impact Nominal Value Unit Test Method		Closures		
Processing Method Injection Molding  Physical Nominal Value Unit Test Method Density 0.952 g/cm³ ASTM D2838  Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) 18 g/10 min ASTM D1238  Hardness Nominal Value Unit Test Method Durometer Hardness (Shore D) 66 ASTM D2240  Mechanical Nominal Value Unit Test Method Tensile Strength (Yield) 26.0 MPa ASTM D638  Tensile Elongation (Break) 1000 MPa ASTM D638  Flexural Modulus 1000 MPa ASTM D790  Impact Nominal Value Unit Test Method		Household Goods		
PhysicalNominal ValueUnitTest MethodDensity0.952g/cm³ASTM D2838Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)18g/10 minASTM D1238HardnessNominal ValueUnitTest MethodDurometer Hardness (Shore D)66ASTM D2240MechanicalNominal ValueUnitTest MethodTensile Strength (Yield)26.0MPaASTM D638Tensile Elongation (Break)1000%ASTM D638Flexural Modulus1000MPaASTM D790ImpactNominal ValueUnitTest Method		Thin-walled Containers		
PhysicalNominal ValueUnitTest MethodDensity0.952g/cm³ASTM D2838Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)18g/10 minASTM D1238HardnessNominal ValueUnitTest MethodDurometer Hardness (Shore D)66ASTM D2240MechanicalNominal ValueUnitTest MethodTensile Strength (Yield)26.0MPaASTM D638Tensile Elongation (Break)1000%ASTM D638Flexural Modulus1000MPaASTM D790ImpactNominal ValueUnitTest Method				
Density 0.952 g/cm³ ASTM D2838  Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) 18 g/10 min ASTM D1238  Hardness Nominal Value Unit Test Method  Durometer Hardness (Shore D) 66 ASTM D2240  Mechanical Nominal Value Unit Test Method  Tensile Strength (Yield) 26.0 MPa ASTM D638  Tensile Elongation (Break) 1000 % ASTM D638  Flexural Modulus 1000 MPa ASTM D790  Impact Nominal Value Unit Test Method	Processing Method	Injection Molding		
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)18g/10 minASTM D1238HardnessNominal ValueUnitTest MethodDurometer Hardness (Shore D)66ASTM D2240MechanicalNominal ValueUnitTest MethodTensile Strength (Yield)26.0MPaASTM D638Tensile Elongation (Break)1000%ASTM D638Flexural Modulus1000MPaASTM D790ImpactNominal ValueUnitTest Method	Physical	Nominal Value	Unit	Test Method
kg)18g/10 minASTM D1238HardnessNominal ValueUnitTest MethodDurometer Hardness (Shore D)66ASTM D2240MechanicalNominal ValueUnitTest MethodTensile Strength (Yield)26.0MPaASTM D638Tensile Elongation (Break)1000%ASTM D638Flexural Modulus1000MPaASTM D790ImpactNominal ValueUnitTest Method	Density	0.952	g/cm³	ASTM D2838
HardnessNominal ValueUnitTest MethodDurometer Hardness (Shore D)66ASTM D2240MechanicalNominal ValueUnitTest MethodTensile Strength (Yield)26.0MPaASTM D638Tensile Elongation (Break)1000%ASTM D638Flexural Modulus1000MPaASTM D790ImpactNominal ValueUnitTest Method				
Durometer Hardness (Shore D)66ASTM D2240MechanicalNominal ValueUnitTest MethodTensile Strength (Yield)26.0MPaASTM D638Tensile Elongation (Break)1000%ASTM D638Flexural Modulus1000MPaASTM D790ImpactNominal ValueUnitTest Method	kg)	18	g/10 min	ASTM D1238
MechanicalNominal ValueUnitTest MethodTensile Strength (Yield)26.0MPaASTM D638Tensile Elongation (Break)1000%ASTM D638Flexural Modulus1000MPaASTM D790ImpactNominal ValueUnitTest Method	Hardness	Nominal Value	Unit	Test Method
Tensile Strength (Yield) 26.0 MPa ASTM D638  Tensile Elongation (Break) 1000 % ASTM D638  Flexural Modulus 1000 MPa ASTM D790  Impact Unit Test Method	Durometer Hardness (Shore D)	66		ASTM D2240
Tensile Elongation (Break)1000%ASTM D638Flexural Modulus1000MPaASTM D790ImpactNominal ValueUnitTest Method	Mechanical	Nominal Value	Unit	Test Method
Flexural Modulus 1000 MPa ASTM D790 Impact Nominal Value Unit Test Method	Tensile Strength (Yield)	26.0	MPa	ASTM D638
Impact Nominal Value Unit Test Method	Tensile Elongation (Break)	1000	%	ASTM D638
<u> </u>	Flexural Modulus	1000	MPa	ASTM D790
Charpy Notched Impact Strength 5.0 kJ/m <sup>2</sup> ASTM D256	Impact	Nominal Value	Unit	Test Method
	Charpy Notched Impact Strength	5.0	kJ/m²	ASTM D256

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

