Unichem 8511G-05

Flexible Polyvinyl Chloride

Colorite Polymers

Message:

Unichem 8511G-05 is a Flexible Polyvinyl Chloride product. It can be processed by extrusion or injection molding and is available in North America. Applications of Unichem 8511G-05 include food contact applications and medical/healthcare.

Good Color Stability

Characteristics include

General Information

Non-Toxic

Sterilizable

Features

Non-Toxic Radiation Sterilizable Uses Food Service Applications Medical/Healthcare Applications Medical/Healthcare Applications Service Applications Medical/Healthcare Applications Service Applicat	reatures	Non-Toxic		
Uses Food Service Applications Medical/Healthcare Applications Medical/Healthcare Applications Agency Ratings FDA Food Contact, Unspecified Rating Appearance Clear/Transparent Forms Pellets Processing Method Extrusion Injection Molding Physical Nominal Value Unit Test Method Specific Gravity 1.25 g/cm³ ASTM D792 Hardness Nominal Value Unit Test Method Durometer Hardness (Shore A) 85 - ASTM D240 Mechanical Nominal Value Unit Test Method Tensile Strength (Yield) 18.3 MPa ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Ingation (Yield) 300 % ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Strength (Yield) 11.4 MPa ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Stress (100% Strain) 11.4 MPa ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Stress (100% Strain) 11.4 MPa ASTM D638 Elastomers Nominal Value Unit Test Method Frittleness Temperature 25.0 °C ASTM D746 Injection Nominal Value Unit Frocessing (Melt) Temp 166 to 177 °C Mold Temperature 10.0 to 37.8 °C Mold Temperature 10.0 to 37.8 °C Mold Temperature 10.0 to 37.8 °C Mold Temperature 10.0 to 37.8 °C				
Agency Ratings FDA Food Contact, Unspecified Rating Appearance Clear/Transparent Forms Pellets Processing Method Extrusion Injection Molding Physical Nominal Value Unit Test Method Durometer Hardness (Shore A) 85 ASTM D2240 Mechanical Nominal Value Unit Test Method Tensile Strength (Yield) 18.3 MPa ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Strength (Yield) 18.3 MPa ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Strength (Yield) 18.3 MPa ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Strength (Yield) 18.4 MPa ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Strength (Yield) 11.4 MPa ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Stress (100% Strain) 11.4 MPa ASTM D412 Thermal Nominal Value Unit Test Method Brittleness Temperature 25.0 °C ASTM D746 Injection Nominal Value Unit Processing (Melt) Temp 166 to 177 °C Mold Temperature 10.0 to 37.8 °C Back Pressure 0.689 to 2.76 MPa		Radiation Sterilizable		
Agency Ratings FDA Food Contact, Unspecified Ratins Appearance Clear/Transparent Forms Pellets Processing Method Extrusion Injection Molding Physical Nominal Value Unit Test Method Durometer Hardness (Shore A) 85 ASTM D2240 Mechanical Nominal Value Unit Test Method Tensile Strength (Yield) 18.3 MPa ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Strength (Yield) 18.3 MPa ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Strength (Yield) 18.3 MPa ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Strength (Yield) 18.4 MPa ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Strength (Yield) 11.4 MPa ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Stress (100% Strain) 11.4 MPa ASTM D412 Thermal Nominal Value Unit Test Method Brittleness Temperature 25.0 °C ASTM D746 Injection Nominal Value Unit Processing (Melt) Temp 166 to 177 °C Mold Temperature 10.0 to 37.8 °C Back Pressure 0.689 to 2.76 MPa Screw Speed 40 to 100 rpm				
Agency Ratings Appearance Clear/Transparent Forms Pellets Processing Method Physical Nominal Value Unit Test Method Durometer Hardness (Shore A) Sesile Strength (Yield) 18.3 Mechanical Nominal Value Unit Test Method Unit Test Method Durometer Hardness (Shore A) Sesile Strength (Yield) 18.3 MPa ASTM D638 Elastomers Nominal Value Unit Test Method Unit Test Method MPa ASTM D638 Elastomers Nominal Value Unit Test Method MPa ASTM D638 Elastomers Nominal Value Unit Test Method MPa ASTM D638 Elastomers Nominal Value Unit Test Method MPa ASTM D638 Elastomers Nominal Value Unit Test Method MPa ASTM D638 Elastomers Nominal Value Unit Test Method MPa ASTM D638 Elastomers Nominal Value Unit Test Method MPa ASTM D638 Elastomers Tensile Strength (Yield) Test Method Test M	Uses	Food Service Applications		
Appearance Clear/Transparent Forms Pellets Processing Method Extrusion Injection Molding Physical Nominal Value Unit Test Method Paralle Strength (Yield) 18.3 MPa ASTM D782 Pesile Strength (Yield) 18.3 MPa ASTM D688 Elastomers Nominal Value Unit Test Method 11.4 MPa ASTM D688 Elastomers Nominal Value Unit Test Method 11.4 MPa ASTM D688 Elastomers Nominal Value Unit Test Method 11.4 MPa ASTM D688 Elastomers Nominal Value Unit Test Method 11.4 MPa ASTM D688 Elastomers Nominal Value Unit Test Method 11.5 MPa ASTM D688 Elastomers Nominal Value Unit Test Method 11.6 MPa ASTM D688 Elastomers Tensile Stress (100% Strain) 11.4 MPa ASTM D618 Eliteness Temperature 25.0 °C ASTM D746 Injection Nominal Value Unit Processing (Melt) Temp 166 to 177 °C Mold Temperature 10.0 to 37.8 °C Back Pressure 0.689 to 2.76 MPa Screw Speed 40 to 100 rpm		Medical/Healthcare Applications		
Appearance Clear/Transparent Forms Pellets Processing Method Extrusion Injection Molding Physical Nominal Value Unit Test Method ASTM D792 Hardness (Shore A) 85 Unit Test Method Durometer Hardness (Shore A) 85 ASTM D792 Mechanical Nominal Value Unit Test Method Tensile Strength (Yield) 18.3 MPa ASTM D638 Tensile Elongation (Yield) 300 % ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Stress (100% Strain) 11.4 MPa ASTM D638 Tensile Stress (100% Strain) 11.4 MPa ASTM D638 Tensile Strenger (100% Strain) 11.4 MPa ASTM D638 Titleness Temperature 25.0 °C ASTM D746 Injection Nominal Value Unit Test Method Brittleness Temperature 25.0 °C ASTM D746 Injection Nominal Value Unit Processing (Melt) Temp 166 to 177 °C Mold Temperature 10.0 to 37.8 °C Back Pressure 0.689 to 2.76 MPa Strew Speed 40 to 100 rpm				
Forms Pellets Processing Method Extrusion Injection Molding Physical Nominal Value Unit Test Method Specific Gravity 1.25 g/cm³ ASTM D792 Hardness Nominal Value Unit Test Method Durometer Hardness (Shore A) 85 ASTM D240 Mechanical Nominal Value Unit Test Method Tensile Strength (Yield) 18.3 MPa ASTM D638 Tensile Elongation (Yield) 300 % ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Stress (100% Strain) 11.4 MPa ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Stress (100% Strain) 11.4 MPa ASTM D638 Eliastomers Nominal Value Unit Test Method Themal Nominal Value Unit Test Method Brittleness Temperature 25.0 °C ASTM D746 Injection Nominal Value Unit Processing (Melt) Temp 166 to 177 °C Mold Temperature 10.0 to 37.8 °C Back Pressure 0.689 to 2.76 MPa Screw Speed 40 to 100	Agency Ratings	FDA Food Contact, Unspecified Rating		
Processing Method Extrusion Injection Molding Physical Nominal Value Unit Test Method Specific Gravity 1.25 Mominal Value Unit Test Method Durometer Hardness (Shore A) 85 ASTM D2240 Mechanical Nominal Value Unit Test Method Test Method Test Method MPa ASTM D2240 Mechanical Nominal Value Unit Test Method Test Method Tensile Strength (Yield) 18.3 MPa ASTM D638 Tensile Elongation (Yield) 300 % ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Stress (100% Strain) 11.4 MPa ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Stress (100% Strain) 11.4 MPa ASTM D412 Thermal Nominal Value Unit Test Method Tensile Stress (100% Strain) 11.4 MPa ASTM D412 Thermal Nominal Value Unit Test Method Tensile Stress (100% Strain) 10.1 to 37.8 "C Mold Temperature 10.0 to 37.8 "C Back Pressure 0.689 to 2.76 MPa Strew Speed 40 to 100 Tensile Stressure 40 to 100 Tensile Stressure ASTM D44 Test Method Test Method MPa ASTM D446 Test Method MPa ASTM D446 Test Method MPa ASTM D446 Test Method	Appearance	Clear/Transparent		
Injection Molding Physical Nominal Value Unit Test Method Specific Gravity 1.25 g/cm³ ASTM D792 Hardness Nominal Value Unit Test Method Durometer Hardness (Shore A) 85 ASTM D2240 Mechanical Nominal Value Unit Test Method Tensile Strength (Yield) 18.3 MPa ASTM D638 Tensile Elongation (Yield) 300 % ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Stress (100% Strain) 11.4 MPa ASTM D412 Thermal Nominal Value Unit Test Method Brittleness Temperature -25.0 "C ASTM D746 Injection Nominal Value Unit Test Method Injection Nominal Value <td>Forms</td> <td colspan="3">Pellets</td>	Forms	Pellets		
Physical Nominal Value Unit Test Method Specific Gravity 1.25 g/cm³ ASTM D792 Hardness Nominal Value Unit Test Method Durometer Hardness (Shore A) 85 ASTM D2240 Mechanical Nominal Value Unit Test Method Tensile Strength (Yield) 18.3 MPa ASTM D638 Tensile Elongation (Yield) 300 % ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Stress (100% Strain) 11.4 MPa ASTM D412 Thermal Nominal Value Unit Test Method Brittleness Temperature -25.0 "C ASTM D746 Injection Nominal Value Unit Test Method	Processing Method	Extrusion		
Specific Gravity 1.25 g/cm³ ASTM D792 Hardness Nominal Value Unit Test Method Durometer Hardness (Shore A) 85 ASTM D2240 Mechanical Nominal Value Unit Test Method Tensile Strength (Yield) 18.3 MPa ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Stress (100% Strain) 11.4 MPa ASTM D412 Thermal Nominal Value Unit Test Method Brittleness Temperature -25.0 °C ASTM D746 Injection Nominal Value Unit Test Method Processing (Melt) Temp 166 to 177 °C Mold Temperature 10.0 to 37.8 °C Back Pressure 0.689 to 2.76 MPa Screw Speed 40 to 100 rpm		Injection Molding		
Specific Gravity 1.25 g/cm³ ASTM D792 Hardness Nominal Value Unit Test Method Durometer Hardness (Shore A) 85 ASTM D2240 Mechanical Nominal Value Unit Test Method Tensile Strength (Yield) 18.3 MPa ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Stress (100% Strain) 11.4 MPa ASTM D412 Thermal Nominal Value Unit Test Method Brittleness Temperature -25.0 °C ASTM D746 Injection Nominal Value Unit Test Method Processing (Melt) Temp 166 to 177 °C Mold Temperature 10.0 to 37.8 °C Back Pressure 0.689 to 2.76 MPa Screw Speed 40 to 100 rpm				
Hardness Nominal Value Unit Test Method Durometer Hardness (Shore A) 85 ASTM D2240 Mechanical Nominal Value Unit Test Method Tensile Strength (Yield) 18.3 MPa ASTM D638 Tensile Elongation (Yield) 300 % ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Stress (100% Strain) 11.4 MPa ASTM D412 Thermal Nominal Value Unit Test Method Brittleness Temperature -25.0 °C ASTM D746 Injection Nominal Value Unit Test Method Processing (Melt) Temp 166 to 177 °C ASTM D746 Mold Temperature 10.0 to 37.8 °C MPa Back Pressure 0.689 to 2.76 MPa MPa Screw Speed 40 to 100 rpm Test Method	Physical	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A) 85 ASTM D2240 Mechanical Nominal Value Unit Test Method Tensile Strength (Yield) 18.3 MPa ASTM D638 Tensile Elongation (Yield) 300 % ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Stress (100% Strain) 11.4 MPa ASTM D412 Thermal Nominal Value Unit Test Method Brittleness Temperature -25.0 °C ASTM D746 Injection Nominal Value Unit Processing (Melt) Temp 166 to 177 °C Mold Temperature 10.0 to 37.8 °C Back Pressure 0.689 to 2.76 MPa Screw Speed 40 to 100 rpm	Specific Gravity	1.25	g/cm³	ASTM D792
Mechanical Nominal Value Unit Test Method Tensile Strength (Yield) 18.3 MPa ASTM D638 Tensile Elongation (Yield) 300 % ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Stress (100% Strain) 11.4 MPa ASTM D412 Thermal Nominal Value Unit Test Method Brittleness Temperature -25.0 °C ASTM D746 Injection Nominal Value Unit Test Method Processing (Melt) Temp 166 to 177 °C Test Method Mold Temperature 10.0 to 37.8 °C Test Method Back Pressure 0.689 to 2.76 MPa Test Method Screw Speed 40 to 100 rpm Test Method	Hardness	Nominal Value	Unit	Test Method
Tensile Strength (Yield) 18.3 MPa ASTM D638 Tensile Elongation (Yield) 300 % ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Stress (100% Strain) 11.4 MPa ASTM D412 Thermal Nominal Value Unit Test Method Brittleness Temperature -25.0 °C ASTM D746 Injection Nominal Value Unit Unit *** Processing (Melt) Temp 166 to 177 °C *** *** Mold Temperature 10.0 to 37.8 °C *** *** Back Pressure 0.689 to 2.76 MPa *** *** Screw Speed 40 to 100 rpm *** ***	Durometer Hardness (Shore A)	85		ASTM D2240
Tensile Elongation (Yield) 300 % ASTM D638 Elastomers Nominal Value Unit Test Method Tensile Stress (100% Strain) 11.4 MPa ASTM D412 Thermal Nominal Value Unit Test Method Brittleness Temperature -25.0 °C ASTM D746 Injection Nominal Value Unit Processing (Melt) Temp 166 to 177 °C Mold Temperature 10.0 to 37.8 °C Back Pressure 0.689 to 2.76 MPa Screw Speed 40 to 100 rpm	Mechanical	Nominal Value	Unit	Test Method
Elastomers Nominal Value Unit Test Method Tensile Stress (100% Strain) 11.4 MPa ASTM D412 Thermal Nominal Value Unit Test Method Brittleness Temperature -25.0 °C ASTM D746 Injection Nominal Value Unit Processing (Melt) Temp 166 to 177 °C Mold Temperature 10.0 to 37.8 °C Back Pressure 0.689 to 2.76 MPa Screw Speed 40 to 100 rpm	Tensile Strength (Yield)	18.3	МРа	ASTM D638
Tensile Stress (100% Strain) 11.4 Nominal Value Unit Test Method Brittleness Temperature -25.0 C Injection Nominal Value Unit Processing (Melt) Temp 166 to 177 C Mold Temperature 10.0 to 37.8 C Back Pressure 0.689 to 2.76 MPa Screw Speed ASTM D746 Protection MPa ASTM D746 Test Method MSTM D746 ASTM D74	Tensile Elongation (Yield)	300	%	ASTM D638
ThermalNominal ValueUnitTest MethodBrittleness Temperature-25.0°CASTM D746InjectionNominal ValueUnitProcessing (Melt) Temp166 to 177°CMold Temperature10.0 to 37.8°CBack Pressure0.689 to 2.76MPaScrew Speed40 to 100rpm	Elastomers	Nominal Value	Unit	Test Method
Brittleness Temperature -25.0 °C ASTM D746 Injection Nominal Value Unit Processing (Melt) Temp 166 to 177 °C Mold Temperature 10.0 to 37.8 °C Back Pressure 0.689 to 2.76 MPa Screw Speed 40 to 100 rpm	Tensile Stress (100% Strain)	11.4	МРа	ASTM D412
InjectionNominal ValueUnitProcessing (Melt) Temp166 to 177°CMold Temperature10.0 to 37.8°CBack Pressure0.689 to 2.76MPaScrew Speed40 to 100rpm	Thermal	Nominal Value	Unit	Test Method
Processing (Melt) Temp 166 to 177 °C Mold Temperature 10.0 to 37.8 °C Back Pressure 0.689 to 2.76 MPa Screw Speed 40 to 100 rpm	Brittleness Temperature	-25.0	°C	ASTM D746
Mold Temperature 10.0 to 37.8 °C Back Pressure 0.689 to 2.76 MPa Screw Speed 40 to 100 rpm	Injection	Nominal Value	Unit	
Back Pressure 0.689 to 2.76 MPa Screw Speed 40 to 100 rpm	Processing (Melt) Temp	166 to 177	°C	
Screw Speed 40 to 100 rpm	Mold Temperature	10.0 to 37.8	°C	
· · · · · · · · · · · · · · · · · · ·	Back Pressure	0.689 to 2.76	MPa	
Screw Compression Ratio 2.0:1.0 to 3.0:1.0	Screw Speed	40 to 100	rpm	
	Screw Compression Ratio	2.0:1.0 to 3.0:1.0		

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

