

# POLYAMIDE 6

## S3200

(ASTM)

### PA6

#### Description

S3200 is a Polyamide 6 grade of medium viscosity.

#### Applications

- Film (Extrusion)

Physical Properties	Unit	Test Method	Typical Value	
Relative Viscosity (1%(w/v) in 96 % (w/w) sulfuric acid)	-	ISO 307	3.20	
Water Content	wt%	ASTM D6869	≤ 0.06	
Extractable Content	wt%	Internal method	≤ 0.50	
Amino End Groups	meq/kg	Internal method	35-45	
Chip Size	no./g	Internal method	70 - 110	
Density	g/cm <sup>3</sup>	ASTM D792	1.12	
Water Absorption (23°C in water)	%	ISO 62	11.1	
Water Absorption (23°C, 50%RH)	%	ISO 62	2.9	
Melting Point	°C	ASTM D3418	220	
Mechanical Properties			Dry	5% Water
Tensile Yield Strength	MPa	ASTM D638	80	37
Tensile Elongation at Yield	%	ASTM D638	4	22
Tensile Elongation at Break	%	ASTM D638	87	436
Tensile Modulus	MPa	ASTM D638	2750	1200
Flexural Strength	MPa	ASTM D790	104	18
Flexural Modulus	MPa	ASTM D790	2650	600
Izod Impact Strength (notched, 23°C)	kJ/m <sup>2</sup>	ASTM D256	6	16
Hardness Rockwell	R Scale	ASTM D785-03	119	100
Thermal Properties			Dry	5% Water
Heat Deflection Temperature (1.80MPa)	°C	ASTM D648	57	-
UL Ratings				
UL Flammability	-	UL94/1.6mm	HB	

The above data are typical laboratory values and are intended to serve as guides only.

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#### **Storage and Handling:**

Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (dust, solids). Store in a cool, dry place. Protect it from moisture absorption and contamination.

#### **Regulatory Compliance:**

Please visit Petro Rabigh website or contact Quality Assurance and Claim Handling Section:  
[Marketing&ProductDevelopmentDept.QA&CH.Section@petrorabigh.com](mailto:Marketing&ProductDevelopmentDept.QA&CH.Section@petrorabigh.com)

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