

RILSAMID®

AMN BLACK P20 TLD

PA12-P, MHLR, 12-005

Rilsamid® AMN BLACK P20 TLD resin is a black colored polyamide. This grade is plasticized and designed for injection molding.

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
RHEOLOGICAL PROPERTIES			
Melt Volume-Flow Rate	44 / *	cm ³ /10 min	ISO 1133
Temperature	235 / *	°C	-
	455 / *	°F	-
Load	2.16 / *	kg	-
	4.76 / *	lb	-
Molding Shrinkage, parallel	1.9 / *	%	ISO 294-4, 2577
Molding Shrinkage, normal	1.9 / *	%	ISO 294-4, 2577
MECHANICAL PROPERTIES			
Tensile Modulus	- / 550	MPa	ISO 527-1/-2
	- / 79800	psi	
Yield Stress	- / 31	MPa	ISO 527-1/-2
	- / 4500	psi	
Yield Strain	- / 19	%	ISO 527-1/-2
Nominal Strain at Break	- / >50	%	ISO 527-1/-2
Charpy Impact Strength, +23°C	- / No Break	kJ/m ²	ISO 179/1eU
Charpy Impact Strength, -30°C	- / No Break	kJ/m ²	ISO 179/1eU
Charpy Notched Impact Strength, +23°C	- / 18	kJ/m ²	ISO 179/1eA
	- / 8.56	ftlb/in ²	
Charpy Notched Impact Strength, -30°C	- / 4	kJ/m ²	ISO 179/1eA
	- / 1.9	ftlb/in ²	
THERMAL PROPERTIES			
Melting Temperature, 10°C/min	174 / *	°C	ISO 11357-1/-3
OTHER PROPERTIES			
Density	1020 / 1020	kg/m ³	ISO 1183
	1.02 / 1.02	g/cm ³	

Processing conditions, Injection:

- Typical melt temperature (Min / Recommended / Max) : 250°C / 270°C / 290°C.
- Mold temperature : 20 - 40°C
- Drying time and temperature (only necessary for bags opened for more than two hours) : 4-6 hours at 80 - 90°C.

Arkema France - A French "société anonyme", registered in the Nanterre (France) Trade and Companies Register under the number 319 632 790 SDC/11-2018
Source: automatically generated TDS from Material Database on 20-02-2024

RILSAMID[®]

AMN BLACK P20 TLD

PROCESSING Injection Molding	Headquarters: Arkema France 420 rue d'Estienne d'Orves 92705 Colombes Cedex France T +33 (0)1 49 00 80 80 hpp.arkema.com Arkema Inc. – High Performance Polymers 900 First Avenue King of Prussia, PA 19406 Tel.: +1 610 205 7000 hpp.arkema.com
DELIVERY FORM Pellets	
ADDITIVES Release agent, Plasticizer	
SPECIAL CHARACTERISTICS Heat Stabilized, Light Stabilized	
REGIONAL AVAILABILITY North America, Europe, Asia Pacific, South and Central America, Near East/Africa	

The statements, technical information and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, ARKEMA expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information; NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. The user should thoroughly test any application before commercialization. Nothing contained herein constitutes a license to practice under any patent and it should not be construed as an inducement to infringe any patent and the user is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement.