# TECHNYL®

## TECHNYL® A 258P1 BLACK 2N

TECHNICAL DATA SHEET

Revised: September, 2018

TECHNYL® A 258P1 Black 2N is an unreinforced and modified polyamide 66, UV and thermal stabilized for injection moulding. This grade offers two main advantages : an excellent impact resistance at ambient and low temperature and a high flexibility.

## GENERAL

| | | |
|---|---|---|
| Material Status | • Commercial: Active | |
| Availability | • Africa & Middle East | • Europe |
| Additive | • Heat Stabilizer | • Impact Modifier |
| Key Benefits | • Heat Aging Resistance<br>• Heat Stabilized (Inorganic)<br>• High Impact Resistance | • Low Temperature Impact Resistance<br>• Good UV Resistance |
| Applications | • Cable ties<br>• Clips & Fasteners | • Consumer and Industrial applications |
| Certification/Compliance | • EC 1907/2006 (REACH) | |
| RoHS Compliance | • RoHS Compliant | |
| Colors Available | • Black | |
| Forms | • Pellets | |
| Processing Method | • Injection Molding | |
| Resin ID (ISO 1043) | • PA66 | |

## PROPERTIES

Typical values of properties are for Black grades

| Physical | Dry | Unit | Test Method |
|---|---|---|---|
| Density | 1.07 | g/cm³ | ISO 1183/A |

| Mechanical | Dry | Unit | Test Method |
|---|---|---|---|
| Tensile Modulus (23°C) | 1180 | MPa | ISO 527-2/1A |
| Tensile Stress (Break, 23°C) | 44 | MPa | ISO 527-2/1A |
| Tensile Strain (Break, 23°C) | > 250 | % | ISO 527-2 |
| Charpy Notched Impact Strength | | | ISO 179/1eA |
| -30°C | 12 | kJ/m² | |
| 23°C | 90 | kJ/m² | |

| Thermal | Dry | Unit | Test Method |
|---|---|---|---|
| Melting Temperature | 260 | °C | ISO 11357-3 |

Solvay Engineering Plastics
www.solvay.com - www.technyl.com

Tel: 00 800 55 400 600
technyl-emea@solvay.com - Europe, Middle East, Africa
technyl-apac@solvay.com - Asia Pacific
technyl-americas@solvay.com - Americas

| Electrical | Dry | Unit | Test Method |
|---|---|---|---|
| Electric Strength | | | IEC 60243-1 |
| 23°C, 0.800 mm | 35 | kV/mm | |
| 23°C, 2.00 mm | 22 | kV/mm | |
| Relative Permittivity (23°C, 2.00 mm, 1 MHz) | 3.20 | | IEC 60250 |
| Dissipation Factor (1 MHz) | 0.032 | | IEC 60250 |

| Flammability | Dry | Unit | Test Method |
|---|---|---|---|
| Flame Rating | | | UL 94 |
| 0.8 mm | HB | | |
| 1.6 mm | HB | | |

## PROCESSING

| Injection | Dry | Unit |
|---|---|---|
| Drying Temperature | 80 | °C |
| Suggested Max Moisture | 0.20 | % |
| Rear Temperature | 265 to 275 | °C |
| Middle Temperature | 270 to 280 | °C |
| Front Temperature | 280 to 285 | °C |
| Mold Temperature | 60 to 80 | °C |

### Injection Notes

The material is supplied in airtight bags, ready for use. In case that the virgin material has absorbed moisture, it must be dried with a dehumidified air drying equipment, dew point mini -20°C. Recommended time 2-4h

Injection Advice:

- For unfilled polyamides, Solvay recommends the use of high alloy steel with a low chromium content. For example: X38CrMoV5-1 (EN Norm) - 1.2367 /1.2343 (DIN Norm). In the case of high requirements on surface quality a mould temperature of up to 120°C can be considered.
- The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry / design

## DISCLAIMER



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## SAFETY INFORMATION

Detailed information regarding safety are available on the safety data sheet (SDS). SDS is sent with the first material order or available by contacting our customer services

## REGULATIONS COMPLIANCE

This product is not intended to be used for the following regulated market: food contact, drinking water, toys, cosmetics or medical devices.

This grade complies with ROHS Directive 2011/65/EU and 2015/863 as amended.

Grades produced or imported in Europe comply with REACH directive 1907/2006/EC as amended.

## CUSTOMER SERVICES

Our customer services are not only concerned with manufacturing and supply of Engineering Plastics products. We are available to assist our customers in finding technical solutions that meet their requirements. Specific support is in particular offered on:

- Material selection
- Material testing
- Parts design advice, training for design engineers
- Part testing
- Design simulation
- Processing through different technologies
- Assembly and post-processing technology expertise
- Parts optimization through Computer Aided Design

You can find more information on Solvay Product range on our internet product finder at the following address: http://www.technyl.com

**Notes**

Typical properties: these are not to be construed as specifications.