

KODAK 3D Printing Filament

ABS · Technical Data Sheet

General Features

Chemical Name Acrylonitrile Butadiene Styrene	Benefits <ul style="list-style-type: none">• High impact resistance, slightly flexible• UV, heat and abrasion resistance• Ideal for post-processing for a shiny, smooth surface (advanced users)	Applications Most common material used in the 3D Printing industry, jigs and fixtures, prototypes, mechanical housings, automotive parts, ideal for functional prototypes stronger than PLA
---	---	---

Filament Characteristics

Diameter	Ø 1.75mm	Ø 2.85mm
Meters per spool	299.82m	113.044m
Weight per meter	2.5g	6.63g
Tolerance	±0.02mm	±0.03mm

Material Properties

		Typical value	ASTM Method
Elongation	%	15	D638
Tensile Strength	MPa (psi)	47.56 (6,790)	D638
Flexural Strength	MPa (psi)	70.6 (10,080)	D790
Flexural Modulus	MPa (psi)	2.4 (347,900)	D790
Izod Impact Strength (3.2mm, 23°C)	kgfcm/cm2 (ft-lb/in)	24 (4.4)	D256
Izod Impact Strength (6.4mm, 23°C)	kgfcm/cm2 (ft-lb/in)	20 (3.7)	D256
Rockwell Hardness	R Scale	109	D785
Density	g/cm3	1.04	D792
Melt Flow Index (220C, 10kg)	g/10min	38	D1238
Mold Shrinkage	%	0.5 - 0.8	D955
Water Absorption	%	-	D570

Recommended printer settings

Print temperature	235±5°C
Print bed temperature	95°C First/Later
Cooling fans	Off
Closed environment	Required
Adhesive	Required

Available Colours

Colour	Pantone Code	Colour	Pantone Code	Colour	Pantone Code
Black	6C	Orange	1505 C	Gray	8402 C
Blue	2935 C	Red	485 C	Natural	--
Green	17-6153 TCX	White	11-4001	Yellow	1235

WARNING!

This product can expose you to chemicals including styrene, which is known to the State of California to cause cancer.

For more information, go to www.P65Warnings.ca.gov

Disclaimer:

This TDS, based on current knowledge and experience, contains a general summary of hazards and is consistent with the information provided by the supplier. No liability can be assumed for the accuracy and completeness of this information. The information in this TDS applies for this specific material only. It therefore does not apply for its usage in combination with other materials or ways of processing. It is user's responsibility to read and understand this information and incorporate it into individual safety programs, according to all legal and regulatory applicable procedures. Smart International gives no warranty whatsoever, including the warranties of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the user shall determine the quality and suitability of the product. Smart International expressly disclaims any and all liability for incidental, consequential or any other damages arising out of the use or misuse of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights.

