



Bilby 3D

MATERIAL DATA SAFETY SHEET

Issued in Australia by Bilby 3D Pty Ltd.

The attached Material Data Safety Sheet has been prepared by the manufacturer outside Australia.

In accordance with Australia WHS regulations the following Australian contact details apply

Section 1: AUSTRALIAN COMPANY DETAILS

In Australia the product is imported and distributed by:
Bilby 3D Pty Ltd

Mailing Address :

Kingsgrove Business Centre, 7/192 Kingsgrove Rd, Kingsgrove NSW 2208

Head Office Address :

Kingsgrove Business Centre, 7/192 Kingsgrove Rd, Kingsgrove NSW 2208

Contact Phone: 1800 847 333

Section 2: AUSTRALIAN EMERGENCY CONTACT

Emergency Contact

In the event of an emergency please contact:

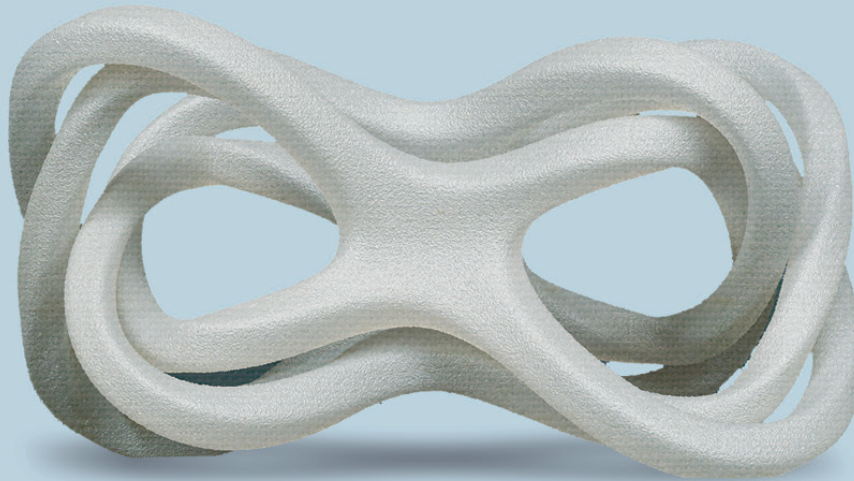
Poisons Information Centre 24 hour Telephone Advice Line on 13 11 26

Section 3: AUSTRALIAN ISSUE DATA

Date of Issue : 1 March 2020



PEKK-A KIMYA



The PEKK-A filament is intended for technical applications requiring a high resistance to temperature (up to 260 °C).

KEPSTAN™
BY ARKEMA

| HEAT RESISTANCE | ABRASION RESISTANCE
| CHEMICAL RESISTANCE | FLAME RETARDANT - UL94 V0

FILAMENT PROPERTIES

PROPERTIES	TEST METHODS	UNITS	VALUES
Diameter	INS-6712	mm	1.75 ± 0.1 2.85 ± 0.1
Specific gravity	ISO 1183	g/cm ³	1.261
Moisture rate	INS-6711	%	< 1
MFI(@380°C – 5 kg)	ISO 1133	g/10min	37 - 47
Glass transition T _g	ISO 11357 DSC (10°C/min - 20-410°C)	°C	159
HDT (1.8 MPa)	ISO 75f	°C	172

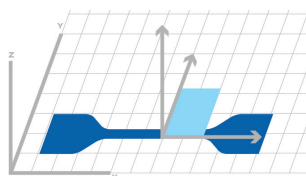
KIMYA

PRINT PARAMETERS AND SPECIMENS DIMENSIONS

PRINT AXIS	XY
PRINT SPEED	20-40 mm/s
INFILL	100% - rectilinear
INFILL ANGLE	45°/-45°
EXTRUSION T°	370-380°C
PLATFORM T°	60-80°C
CHAMBER T°	110-125°C

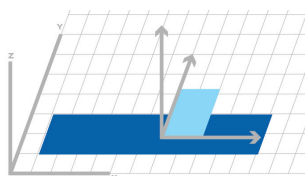
RESULTS

TENSILE TEST



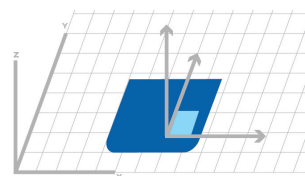
Dim.(mm) : 75x1.25x2
Éprouvette de type ISO 527-5A

BENDING TEST – CHARPY IMPACT



Dim. (mm) : 80x10x4

HARDNESS



Dim.(mm) : 45x45x4

PRINTED SPECIMENS PROPERTIES

	PROPERTIES	TEST METHODS	UNITS	VALUES
THERMAL PROPERTIES	Maximum use T°	-	°C	260°C
	Thermal conductivity	ASTM E1530-11	W/mK	0.21
ELECTRICAL PROPERTIES	Dielectric constant	IEC 60243-1	KV/mm	84
	Surface resistivity	ASTM D257	Ohms/m ²	10 ¹⁶
TENSILE	Tensile modulus	ISO 527	MPa	2,850
	Tensile strenght	ISO 527	MPa	85
	Elongation at break	ISO 527	%	8

CHEMICAL RESISTANCE

EXCELLENT

Unattacked material and little or no absorption
acids, alcohols, alkyds, ketones, bases, esters, ethers, halogens, hydrocarbons

NOT RECOMMENDED

Nitric acid, sulfuric acid, methylene chloride

CERTIFICATION

FLAME RETARDANT

UL 94 V0