

POMC SL
TECHNICAL DATA SHEET

FULL NAME: POLYOXYMETHYLENE COPOLYMER FILLED POLYETHYLENE

MECHANICAL PROPERTIES	TEST METHOD	UNIT	PARAMETER	GUIDELINE VALUES
TENSILE STRENGTH	DIN EN ISO 527-2	MPA	50 MM/MIN	48
MODULUS OF ELASTICITY (TENSILE TEST) ⁽¹⁾	DIN EN ISO 527-2	MPA	1 MM/MIN	2100
TENSILE STRENGTH AT YIELD	DIN EN ISO 527-2	MPA	50 MM / MIN	48
ELONGATION AT YIELD	DIN EN ISO 527-2	%	50 MM / MIN	9
ELONGATION AT BREAK	DIN EN ISO 527-2	%	50 MM / MIN	9
FLEXURAL STRENGTH ⁽²⁾	DIN EN ISO 178	MPA	2 MM / MIN, 10N	70
MODULUS OF ELASTICITY (FLEXURAL TEST)	DIN EN ISO 178	MPA	2 MM / MIN, 10N	2000
COMPRESSION STRENGTH ⁽³⁾	EN ISO 604	MPA	1% / 2% / 5% 5 MM/MIN, 10 N	16/27/54
COMPRESSION MODULUS ⁽⁴⁾	EN ISO 604	MPA	5 MM/MIN, 10N	1800
IMPACT STRENGTH (CHARPY) ⁽⁵⁾	DIN EN ISO 179-1EU	KJ/M2	MAX 7,5 J	27
BALL INDENTATION HARDNESS ⁽⁶⁾	ISO 2039-1	MPA	-	120

THERMAL PROPERTIES				
GLASS TRANSITION TEMPERATURE ⁽⁷⁾	DIN EN ISO 11357	°C	-	-60
MELTING TEMPERATURE	DIN EN ISO 11357	°C	-	166
SERVICE TEMPERATURE ⁽⁸⁾	-	°C	SHORT TERM	140
SERVICE TEMPERATURE	-	°C	LONG TERM	100
THERMAL EXPANSION (CLTE)	DIN EN ISO 11359-1;2	10 ⁻⁵ K ⁻¹	23-60° C, LONG.	13
THERMAL EXPANSION (CLTE)	DIN EN ISO 11359-1;2	10 ⁻⁵ K ⁻¹	23-100°C, LONG.	14
SPECIFIC HEAT	ISO 22007-4:2008	J/(G*K)	-	1,4
THERMAL CONDUCTIVITY	ISO 22007-4:2008	w/(K*M)	-	0,39

ELECTRICAL PROPERTIES				
SURFACE RESISTIVITY	DIN IEC 60093	Ω	-	10 ¹⁴

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VOLUME RESISTIVITY	DIN IEC 60093	$\Omega \cdot \text{CM}$	-	10^{14}
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MISCELLANEOUS PROPERTIES –				
WATER ABSORPTION ⁽⁹⁾	DIN EN ISO 62	%	24H / 96H (23°C)	0,05 / 0.1
RESISTANCE TO HOT WATER / BASES ⁽¹⁰⁾	-	-	-	+
RESISTANCE TO WEATHERING ⁽¹¹⁾	-	-	-	-
FLAMMABILITY (UL94) ⁽¹²⁾	DIN IEC 60695-11-10	-	CORRESPONDING TO	HB

REV.	DATE	DESCRIPTION	MODIFIED PARAGRAPHS	WRITTEN BY	APPROVED BY
00	01/2021	FIRST ISSUE	//	601.271	601.271

- (1) FOR TENSILE TEST: SPECIMEN TYPE 1B
(2) FOR FLEXURAL TEST: SUPPORT SPAN 64MM, NORM SPECIMEN.
(3) SPECIMEN 10X10X10MM
(4) SPECIMEN 10X10X50MM, MODULUS RANGE BETWEEN 0.5 AND 1% COMPRESSION.
(5) FOR CHARPY TEST: SUPPORT SPAN 64MM, NORM SPECIMEN.
(6) SPECIMEN IN 4MM THICKNESS
(7) FOUND IN PUBLIC SOURCES.
(8) FOUND IN PUBLIC SOURCES. INDIVIDUAL TESTING REGARDING APPLICATION CONDITIONS IS MANDATORY.
(9) Ø CA. 50MM, H=13MM
(10) (+) LIMITED RESISTANCE
(11) - POOR RESISTANCE
(12) CORRESPONDING MEANS NO LISTING AT UL (YELLOW CARD). THE INFORMATION MIGHT BE TAKEN FROM RESIN, STOCK SHAPE OR ESTIMATION. INDIVIDUAL TESTING REGARDING APPLICATION CONDITIONS IS MANDATORY.

THIS DATASHEET AND ALL PROPRIETIES INDICATED COME DIRECTLY FROM THE PRODUCER'S STUDIES AND TESTS. D.H. LAMINA S.R.L. DOES NOT PRODUCE THE MATERIAL.
THE CONTENTS OF THIS DATASHEETS ARE MEANT TO GIVE AN OVERVIEW OF THE PRODUCT'S PROPRIETIES. IT REFLECTS OUR CURRENT KNOWLEDGE AND MAY NOT BE COMPLETE. THE VALUES SHOULD BE TAKEN AS GUIDE VALUES BECAUSE THEY ARE DEPENDENT ON SURROUNDING CONDITIONS AND MACHINING METHODS. THE VALUES ARE IN NO WAY A LEGALLY BINDING ASSURANCE OF THE PRODUCT'S PROPRIETIES OR ITS SUITABILITY FOR USE IN A SPECIFIC APPLICATION. ALL STATED VALUES ARE AVERAGE ESTABLISHED FROM MANY INDIVIDUAL TESTS. FOR SPECIFIC APPLICATIONS, WE RECOMMEND DETERMINING SUITABILITY BY MEANS A TRIAL.

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