



POLYBUTYLENE TEREPHTHALATE (PBT)

MATERIAL DATA SHEET

B4500 UV

MEDIUM VISCOSITY POLYBUTYLENE TEREPHTHALATE

THE INFORMATION DESCRIBED BELOW IS A GENERAL OVERVIEW, TO THE BEST OF OUR KNOWLEDGE AND SHOULD NOT BE APPLIED AS SPECIFICATION LIMITS. IT IS THE RESPONSIBILITY OF THOSE TO WHOM WE SUPPLY OUR PRODUCTS TO ENSURE THAT THE INFORMATION IS CERTIFIED ACCORDING TO PRODUCTION STANDARDS. THE VALUES WERE OBTAINED BY ANALYSIS DONE ANNUALLY ACCORDING TO ISO STANDARDS AT 23°C/ 50% U.R.

FEATURES	UNIT	TEST MÉTHOD	TYPICAL
		ISO	VALUES
DENSITY	g/ cm ³	1183	1,30
VISCOSITY NUMBER (SULPHURIC ACID 25°C)	ml/ g	307	121 – 138
WATER ABSORTION (SATURATION)	%	-	0,25 – 0,50
MELTING POINT	°C	3146	220– 225
MOULDING SHRINKAGEM	-	-	1,5

MECHANICAL PROPERTIES

YOUNG MODULUS	MPa	527-2	2500
TENSILE STRESS AT BREAK / AT YIELD	MPa	527-2	60
ELONGATION	%	899-1	3,7
FLEXURAL MODULUS	MPa	178	---
FLEXURAL STRESS AT BREAK	MPa	178	85
CHARPY UNOTCHED IMPACT RESISTENCE	kJ/ m ²	179	290
CHARPY NOTCHED IMPACT RESISTENCE	kJ/ m ²	179	6
IZOD UNOTCHED IMPACT RESISTENCE	kJ/ m ²	180	-
IZOD NOTCHED IMPACT RESISTENCE	kJ/ m ²	180	-
BALL INDENTATION HARDNESS H358/ 30	MPa	2039-1	-

THERMAL PROPERTIES

FLEXURAL TEMPERATURE AT LOAD (HDT A)	°C	75-2	65
FLEXURAL TEMPERATURE AT LOAD (HDT B)	°C	75-2	165
LIMIT TEMPERATURE AT FEW HOURS OPERATION	°C	-	200
THERMAL COEF. LINEAR EXPAN. LONG./ TRANSV. (23 – 80) °C	10 ⁻⁵	-	13 - 16
SPECIFIC HEAT CAPACITY	W/ (m . K)	-	1,5

FIRE BEHAVIOR

UL 94	-	UL 94	94 HB
FMVSS 302	-	FMVSS 302	+