



HD-ECO-TECH® is a quality brand for products made of polypropylene and polyethylene.

SERVICE

Selection of our rotational moulding material considering the requirements of your final product

Perfectly matched selection of additives for thermal stability and flame retardancy

Improved chemical and physical properties

Customized surface finish of your products

Individual support from first consultation up to start of production



HD Kunststoffe GmbH

Waldecker Str. 21
99444 Blankenhain/Thuringia
GERMANY

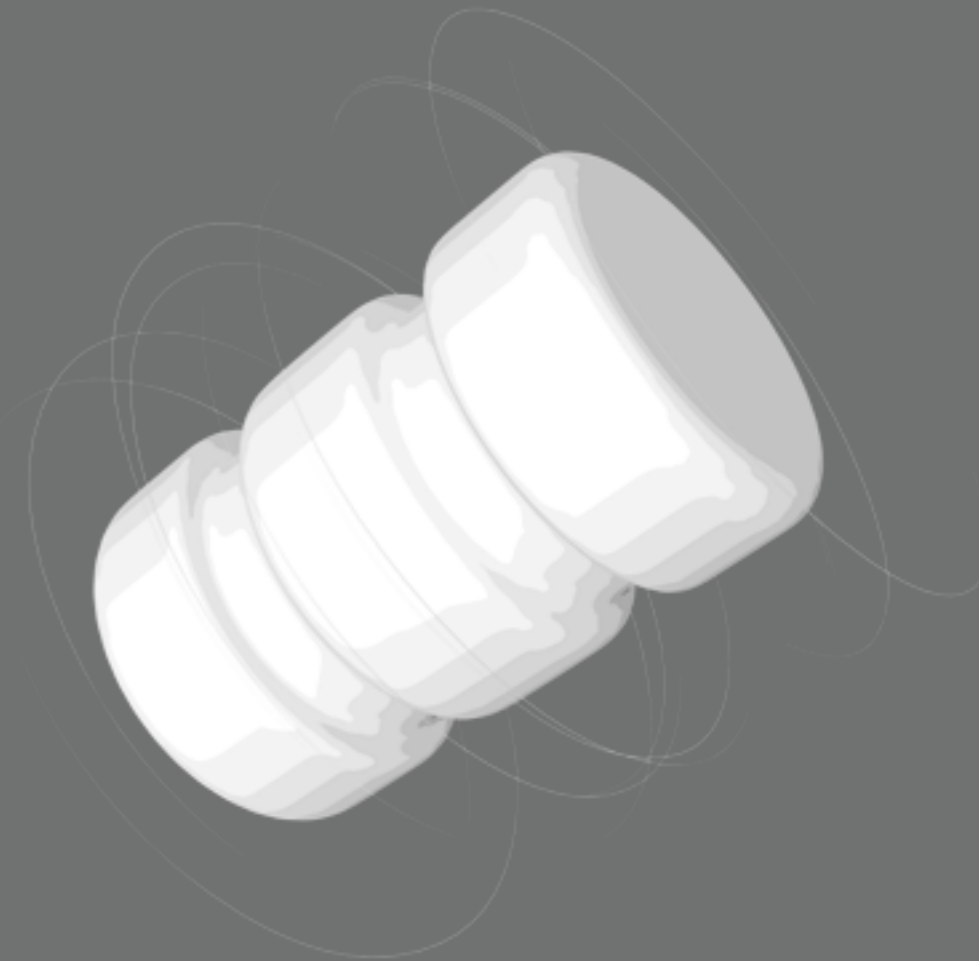
Phone +49 36459 - 45 - 0
Fax +49 36459 - 45 - 145
info@hd-kunststoffe.com

www.hd-kunststoffe.com

an enterprise of



ROTATIONAL
MOULDING
PRODUCT SUMMARY



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HD ECO - TECH®		PP			PE			PC	PA6
	ISO	RM PPL 111050	RM PPL 112000	RM PPL 113900	RM 10440 UV	RM 10635 UV	RM 20935 UV	RM X32120	RM X27112
Main Resin		PPC	PPC	PPC	mMDPE	mMDPE	LMDPE	PC	PA6
Density [g / cm ³] 23 °C	1183	0,902	0,902	0,902	0,940	0,935	0,935	1,2	1,12
MFI [g / 10 min]	1133 / D	11 (230°C)	12(230°C)	12 (230°C)	4 (190°C)	6 (190°C)	9 (190°C)	32 (300°C)	-
Tensile Modulus [MPa]	179	1.150	1.050	960	-	-	960	2300	2600
Flexural Modulus [MPa]	178	1.050	960	900	730	700	600	2400	2500
Tensile strength at Yield [MPa]	527 - 2	22	19	17	21	18	17	60	72
Tensile Strength at Break [MPa]	527 - 2	-	-	-	21	11	16	66	-
Elongation Strength at Yield [%]	527 - 2	18	20	22	11	-	-	-	-
Elongation Strength at Break [%]	527 - 2	-	-	-	800	> 700	> 700	120	-
Environmental Stress Crack Resistance ESCR [h]	22088 ASTM D1693	-	-	-	450 (10 %) > 1.000 (100 %)	450 (10 %) > 1.000 (100 %)	> 5 00 (10 %) > 1.000 (100 %)	-	-
Izod Notched Impact Strength [KJ / m ²] (23 °C)	180	32	48	66	-	-	-	74	-
Charpy Notched Impact Strength [KJ / m ²]	179 - 1	-	-	-	> 150 (23 ° C) > 150 (-30 ° C)	> 200 (23 ° C) > 160 (-30 ° C)	-	-	6 (23°C)
Shore Hardness [KJ / m ²]	R - 868	60 D	56 D	52 D	-	59 D	53 D	80 D	-
Vicat Softening Point [°C]	306	66 (50 N) 125 (10 N)	65 (50 N) 120 (10 N)	63 (50 N) 118 (10 N)	126 (50 N)	121 (50 N)	113 (50 N)	150 (50 N)	190 (50 N)
Oven Temperature [°C]		270 - 300	270 - 300	270 - 300	200 - 260	200 - 260	200 - 260	-	-
Tooling Temperature [°C]		215 - 220	210 - 215	205 - 215	160 - 200	160 - 200	160 - 200	330	235
Melting Point [°C]	3146	140	135	132	126	123	113	148 (Tg)	220
PIAT [°C]		218	214	210	186	180	176	300	220
Description		PP nucleated random copolymer thermally stabilised High trans-luence High stiffness Excellent surface finishing. UV Stabilisation upon request.	PP nucleated random copolymer thermally stabilised High trans-luence Excellent surface finishing. UV Stabilisation upon request.	PP nucleated random copolymer Easy processing (similar to PE) thermally stabilised High trans-luence Excellent surface finishing High impact resistance at low temperatures. UV Stabilisation upon request.	MDPE metallocene with Hexene (C6) comonomer UV and thermally stabilised High density High impact resistance at low temperatures High gloss.	MDPE metallocene with Hexene (C6) comonomer UV and thermally stabilised High MFI and lower density High impact resistance at low temperatures High gloss.	LDPE medium density with Butene (C4) comonomer UV and thermally stabilised Good mechanical properties Excellent surface finishing.	Impact protected, heat stabilized polycarbonate compound adjusted for rotational moulding applications. UV Stabilisation upon request.	Thermal stabilized Polyamide 6 (PA6, Nylon) compound adjusted for rotational moulding applications. UV-Stabilisation upon request.
Application		Planters, Pots, Design items; lamps- hodes; luminated ad-vertisings; neon signs; heat exchangers; technical products (diesel, grease and lye proof).	Hydraulic tanks; water storage tanks up to 70°C; control shafts; technical parts; toys; drinking water tanks.	For monolayered parts; heat exchangers up to 90°C; water sport articles (kayaks, boats, canoes, buoys); technical parts; fenders for field machines.	For all kind of tanks (water, diesel, chemicals); toys; IBCs and technical parts..	All kind of parts. For small and middle sized tanks (water, diesel and chemicals); toys; water sport (canoes, kayaks, boats); IBC's; technical parts in automotive and agriculture.	For small parts; plant pots; design items or tools with challenging geometries and complicated dimensions; leisure articles (sports, toy); lampshades of all kind; technical products.	Glass-like, high end lightning elements with high optical clarity.	Technical parts (Fuel Tanks) where high impact strength and barrier properties are required.

HD-ECO-TECH® for the optimized production of heat-, alkaline- and acid-resistant products for all applications within rotational moulding.

MICROGRANULES

Raw materials in all colors (i.e. RAL or tailor-made) and with all special features required for rotational moulding applications:

- Antistatic behaviour
- Brilliant colors
- Extensive range of materials for rotational moulding (color compounds incl. additives)
- Excellent filling behaviour for difficult geometric tools
- No dust or danger of explosion
- Customized packaging
- All products also available as powder or standard granules

The values provided in this document are based upon technical information from raw material suppliers believed to be reliable. The values and results have been obtained under controlled laboratory testing conditions. Own tests by the user under target conditions are recommended. HD Kunststoffe therefore can not assume any legal responsibility for the use and reliance of the materials and their data presented hereby. We expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with the handling, storage, use, or disposal of our products.