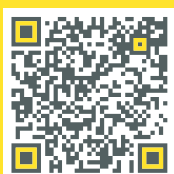


PLASTICS AND DRINKING WATER

THE PLASTICS PORTFOLIO FOR THE SANITARY
AND WATER INDUSTRY



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POLYMER GROUP



PLASTICS AND DRINKING WATER

Water plays a key role in our daily lives. Clean water is a staple food and essential for every human being. The components intended for contact with water are subject to stringent regulations and controls to ensure clean water. In addition to the hygienic and microbial aspects materials must comply with other technical requirements such as strength, corrosion and chemical resistance.

Water contact and relevant examinations

Different country guidelines exist worldwide for the approval of finished parts with contact to drinking water. The scope of testing includes possible contamination of the water with hazardous substances, sensory analysis but also growth of bacteria. Key tests include:

Germany

KTW (Kontakt mit Trinkwasser = contact with drinking water)
DVGW (Deutscher Verein des Gas- und Wasserfaches = German Association for gas and water applications)
W270 – Determination of microbial growth

France

ACS (Accreditation de Conformite Sanitaire = contact with drinking water)
AFNOR XPP 41-250

Great Britain

WRAS (Water Regulation Advisory Scheme)
British Standard BS 6920

U.S.A

NSF 61 (National Sanitation Foundation)

The plastics portfolio for the sanitary and water industry

The TER PLASTICS POLYMER GROUP has a wide portfolio of plastics for use in drinking water applications. It encompasses the brands Tarnoform, Duracon, Technyl and TEREZ. The range includes materials that are approved for contact with hot and cold water. Engineering plastics possess low migration values, neutral taste and corrosion resistance. Their high mechanical property profiles lead to optimum solutions in the household and sanitary sector.

Raw materials for contact with water

POM – Duracon®, Tarnoform®

Polyoxymethylene (POM), also known as polyacetal, is a semi-crystalline soft plastic. As an engineering plastic POM is particularly being used for precision parts due its high stiffness, low friction and excellent dimensional stability. POM absorbs very little water thus the physical properties of the moldings only change slightly. The good chemical resistance and low water absorption make POM ultimately suitable for use in contact with food and drinking water. The Duracon products distinguish themselves by their global certification for drinking water applications.

PA66 – Technyl®

Polyamide 66 is a semi-crystalline soft plastic with a balanced property profile. It combines high chemical resistance with excellent mechanical properties. TECHNYL A218WV30 is used in many applications in the sanitary sector.

PA66 + 6I/6T – TEREZ® GT3

TEREZ GT3 is a semi-crystalline, partially aromatic construction material for metal replacement. It combines highest strength and stiffness with excellent surface quality and chemical resistance. These properties are only marginally affected by water absorption. The TEREZ GT3 W-series is physiologically safe and can be used in direct contact with drinking water.



HDPE – XSene

HDPE is a high density polyethylene. Polyethylene has high resistance to acids and alkalis and is characterized by very low water absorption. The gas and water permeability is considerably less compared to many other plastics. Thanks to the Advanced Double Loop (ADL) technology XSene offers improved stiffness, impact strength and resistance to stress cracking.



Material	Producer	Product	Product code	KTW	DVGW,W270	WRAS	ACS	NSF61
POM	GRUPA AZOTY S.A.	TARNOFORM	T200		●			
POM	GRUPA AZOTY S.A.	TARNOFORM	T300	1,2	●	1,2	●	
POM	GRUPA AZOTY S.A.	TARNOFORM	T400	1,2	●	1,2	●	
POM	GRUPA AZOTY S.A.	TARNOFORM	T411	1,2	●	1,2	●	
POM	GRUPA AZOTY S.A.	TARNOFORM	T500		●			●
POM	POLYPLASTICS EUROPE GMBH	DURACON	AW-01					●
POM	POLYPLASTICS EUROPE GMBH	DURACON	EX-09					
POM	POLYPLASTICS EUROPE GMBH	DURACON	M25-44			1,2,3		
POM	POLYPLASTICS EUROPE GMBH	DURACON	M90-44	1,2,3*	●	1,2,3	●	●
POM	POLYPLASTICS EUROPE GMBH	DURACON	M90-44			1,2,3		●
POM	POLYPLASTICS EUROPE GMBH	DURACON	M270-44			1,2,3		●
POM	POLYPLASTICS EUROPE GMBH	DURACON	GB-25R			1,2,3		●
POM	POLYPLASTICS EUROPE GMBH	DURACON	GH-25	1,2,3*		1,2,3		●
PA66	SOLVAY ENGINEERING PLASTICS	TECHNYL	A218WW30	1	●			
PA66+6I/6T	TEREZ PERFORMANCE POLYMERS	TEREZ GT3	300 HG30 W	1	●			
PA66+6I/6T	TEREZ PERFORMANCE POLYMERS	TEREZ GT3	300 HG40 W	1	●			
PA66+6I/6T	TEREZ PERFORMANCE POLYMERS	TEREZ GT3	300 HG50 W	1	●			
PA66+6I/6T	TEREZ PERFORMANCE POLYMERS	TEREZ GT3	300 HG60 W	1	●			
HDPE	TOTAL PETROCHEMICALS	HDPE	3802 B	**	●			
HDPE	TOTAL PETROCHEMICALS	XSENE	55060	**	●			
HDPE	TOTAL PETROCHEMICALS	XSENE	XS10H	**				
HDPE	TOTAL PETROCHEMICALS	XSENE	XRC20B	**				
HDPE	TOTAL PETROCHEMICALS	XSENE	XRC20	**				

1 = cold water 23°C , 2 = warm water 60°C, 3 = hot water 85°C, * = application specified release, ** = application specified release

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