

## Potable Water Application Solutions Guide

*Materials designed for hydrolytic stability, high heat, chemical resistance and dimensional stability.*

The safety of water management components is critical to ensure clean drinking water for those across the world. The continuous implementation of plastic within these systems calls for the regulation and testing of the materials used. Conventus Polymers compounds and distributes polymers that are safe, efficient, and resistant to plumbing, heating, and sanitary systems.

**NSF 61**- determines the health effects of materials and products that come into contact with drinking water, drinking water chemicals, or both in the **United States and Canada**.

**KTW**- in accordance with standards from the Federal Environmental Agency (UBA) of **Germany**, determine if non-tolerable changes in drinking water occur due to non-metal products released substances.

**W270/DVGW**- Under **German** Federal Environment Agency and German Technical and Scientific Association for Gas and Water, certifies the product does not have any microbial growth on surfaces that come in contact with drinking water

**WRAS**- In compliance with Water Supply (Water Fittings) Regulations or Scottish Byelaws in the **United Kingdom**, determines water fittings do not allow waste, misuse, undue consumption, or contamination of the water supply

**ACS**- According to regulations of the Attestation de Conformité Sanitaire (ACS) of **France**, determines materials coming in contact with drinking water do not alter the properties of water necessary for the AC

### Applications:

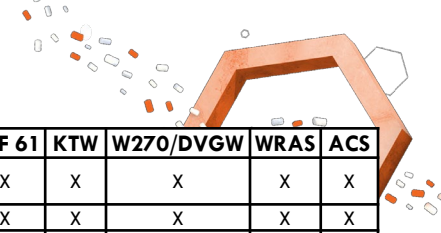
- Pumps and valves
- Water meters
- Boilers
- Heating system components
- Sanitary faucets and shower components
- Water softeners
- Water filtration
- Pipes, fittings and valves
- Toilet valve water meter



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Resin	Type	Description		Grades	NSF 61	KTW	W270/DVGW	WRAS	ACS
<b>Sabic Noryl</b>	PPO + PS blend	<ul style="list-style-type: none"> <li>Hydrolytic Stability</li> <li>Low water absorption</li> <li>Dimensional stability</li> <li>Low creep</li> </ul>	20-40% Glass filled	FE1 410PW, FE1 520PW, FE1 740PW, FE1 630PW	X	X	X	X	X
			UL746C f2, Glass filled PPE+HIPS High ductility & Impact	731S ENG265F GFN3F, GFN2F GFN1 630V 731F WWM230N	X				
			UL746C f1, Glass filled 30% Glass filled Copper & Brass replacement, Glass filled	GFN1F, GFN2F, GFN3F GTX 830 (PA66/PPO) PPX630F, PPX640F, PX1 543F, PX4608F					
<b>Sabic LNP Elcrin</b>	PBT w/ PCR Content	<ul style="list-style-type: none"> <li>Post-consumer recycled content</li> <li>Excellent strength, stiffness, and dimensional stability</li> </ul>	30% glass filled, minimum 37% PCR weight content	WF006LIQ	X	X	X	X	X
<b>Sabic Ultem</b>	PEI	<ul style="list-style-type: none"> <li>Excellent strength</li> <li>Excellent abrasion resistance</li> <li>Unparalleled mechanical performance in high heat, chemically challenging environments</li> </ul>	Unreinforced to 30% Glass filled	PW2300, PW2100, PW1000	X	X	X	X	X
<b>EMS Grilamid L PA 12 FWA</b>	PA12	<ul style="list-style-type: none"> <li>Very low water absorption</li> <li>High dimensional stability</li> <li>Excellent chemical and UV resistance</li> <li>Strong Hydrolysis resistance</li> <li>High impact strength</li> <li>High elongation compared to other technical polymers with identical stiffness values</li> <li>Very favorable processing parameters due to low mold and material temperatures</li> </ul>	Improved UV & Impact	20H FWA	X	X	X	X	X
				LBKN-30H FWA, LBKN-50H FWA, LBKN-65H FWA	X	X	X	X	X
			Outdoor use, Impact Modified, 30-65% Glass filled	LV-30H FWA, LV-50H FWA, LV-65H FWA	X	X	X	X	X
<b>EMS Grivory GV FWA</b>	Partially Aromatic Polyamide	<ul style="list-style-type: none"> <li>High level of stiffness and strength</li> <li>Little change in property values after absorption of moisture</li> <li>Low dampness and water absorption</li> <li>Good dimensional stability and low warpage</li> <li>Good chemical resistance, typical of polyamides</li> <li>Good surface quality</li> </ul>	20-40% Glass filled	GV-2 FWA, GV-4 FWA, GV-5 FWA, GV-6 FWA	X	X	X	X	X
<b>EMS Grivory HT</b>	PPA	<ul style="list-style-type: none"> <li>Stiffness and strength at high operating temps</li> <li>Little change in property values after water absorption</li> <li>Good dimensional stability</li> <li>Good chemical resistance</li> <li>Good surface quality</li> </ul>	Outdoor Use, 30-60% Glass filled	HT1V-3 FWA, HT1V-4 FWA, HT1V-5 FWA, HT1V-6 FWA	X	X	X	X	X
<b>Toray Torelina</b>	PPS	<ul style="list-style-type: none"> <li>Heat Resistance</li> <li>Dimensional stability</li> <li>Outstanding chemical resistance</li> <li>High strength and rigidity with minimum decline at high temperatures</li> <li>Outstanding anti-fatigue and anti-creep</li> <li>Inherently flame retardant</li> <li>Outstanding flowability</li> </ul>	40% Glass filled 30% Glass, High Impact Elastomer-modified	A604-WR A673M-WR A670R63	X	X	X	X	X
			30% Glass, High Impact	A673M-T	X			X	
<b>YOUJU Paryls</b>	PPSU	<ul style="list-style-type: none"> <li>Dimensionally stable Outstanding ductility</li> <li>HDT of 207C</li> <li>Capable of 1000+ autoclave cycles</li> <li>Inherently flame retardant</li> </ul>	UL94 V-0 UL94 V-0 UL94 V-0, High Flow	F1150 F1250 F1350	X				
	PSU	<ul style="list-style-type: none"> <li>Excellent hydrolytic stability High strength</li> <li>HDT of 174C</li> <li>Capable of 100+ Autoclave cycles</li> <li>Inherently flame retardant</li> </ul>	UL94 V-1 UL94 V-1 UL94 V-1, High Flow	F3050 F3150 F3250	X				
	mPPSU	<ul style="list-style-type: none"> <li>Improved notch resistance to PSU</li> <li>Most cost-efficient</li> <li>Properties fall between PSU and PPSU</li> </ul>		M1150	X				
<b>LG Chem Lumiloy</b>	mPPE	<ul style="list-style-type: none"> <li>Excellent dimensional stability</li> <li>Great electrical properties</li> <li>High heat resistance</li> <li>Good hydrolysis resistance</li> <li>Great processability</li> <li>Excellent impact resistance</li> </ul>	20-30% Glass filled	GP2200, GP2300	X			X	X
			20-30% Glass filled	GP2200K, GP2300K	X	X			X
<b>Hyosung Poketone</b>	POK	<ul style="list-style-type: none"> <li>Good dimensional stability</li> <li>High impact strength</li> <li>Great chemical resistance</li> <li>Great wear resistance</li> <li>Short molding cycles</li> <li>Flame retardant</li> </ul>	High Flow	M330F, M930F M630F M710F, M730F	X	X	X	X	X
			High Viscosity Mono-filament	M410FS	X	X	X		X
			30% Glass filled	M33FG6A	X	X	X		
<b>Idemitsu Xarec</b>	SPS	<ul style="list-style-type: none"> <li>Good solvent resistance</li> <li>Excellent electrical properties</li> <li>Hydrolysis resistance</li> <li>HDT of 250 °C</li> </ul>	20-30% Glass filled	WA210, WA212, WA552	X				