

**SOLIN** 5.A. is a Greek production company that produces composite and plastic pipes as well as fittings of a wide range of applications. It's one of the oldest companies of its kind and the only one with such a large range of pipe production for heating and sanitation. Primary and integral presupposition of its existence, since its establishment until today, is the quality of its products.

The well trained staff of the company consisting of 80 employees, works daily for covering the philosophy of the company that is "total customers satisfaction". The head office, the management and some warehouses are located in Athens, while the factory with the main warehouses are located in A' Industrial Area of Volos with buildings of 17.500m<sup>2</sup>, in a total plot extent of about 33.000m<sup>2</sup>.

In a course of more than 35 years of the manufacturing process and having the experience and knowledge of experts in this field, our products are among the top quality of their kind in the international markets and provide practical, reliable and enduring solutions to multiple applications.







Of our production in exports



ISO certificate since 2000



Certifications from international institutes

















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SANITATION

COOLING

# **TECHNICAL INFORMATION**

**SOLISAN** pipes produced from POLYPROPYLENE RANDOM type-3 (PP-R 80) in accordance with the German specifications DIN 8077-78 and European standards EN ISO 15874. Among plastic pipes, PPR pipe is very popular in plumbing installations, across the world. It was developed in Europe in the early 1990s, manufactured by extrusion machines for the pipes, and injection molding machines for the fittings.



With more than 20 years of proven performance, PP-R system has been used throughout the world for potable hot and cold water supply in applications for homes, offices or industrial buildings for waste and chemical liquids and for compressed air.

Known for its excellent physical and chemical properties even at high temperatures, SOLISAN's main properties, (such as compression strength, elasticity, chemical and heat resistance), classifies it as the ideal choice for long lasting and low maintenance heating and plumbing solutions.

PIPE DIMENSIONS				
20 x 3,4 mm	40 x 6,7 mm			
25 x 4,2 mm	50 x 8,3 mm			
32 x 5,4 mm	63 x 10,5 mm			

LIFE DURATION								
OPERATION TIME (with SF 1,25)	20°C	30°C	40°C	50°C	60°C	70°C	80°C	
LIFE IN YEARS (with SF 1,25)	50	50	50	50	50	50	25	
MAX.OPERATION PRESSURE (Atm)	30.9	26.1	22	18.5	15.3	10.2	7.6	

PHYSICAL PROPERTIES	Units	Value
Density at 23°C	g/cm³	0.902
Melt Flow Index (190°C/5kg)	g/10min	0,5
VICAT softening point	۰C	130
Coefficient of linear thermal expansion (20°C)	o <b>C</b> -1	1,5X10 <sup>-4</sup>
Thermal Conductivity at 20°Cw	W/(m*K)	0,24
Specific heat (20°C)	J/(gºK)	2

MECHANICAL PROPERTIES	Units	Value
Tensile strength	MPa	16.5
Elongation at break	%	300
Flexural modulus	MPa	550
Impact test (Charpy)	kJ/m²	No breakage

SOLISAN pipes are certified by SKZ institute for their mechanical resistance.



## **INSTALLATION TIPS**



### STORAGE AND HANDLING

Store the pipes and fittings in their original packing under cover in order to prevent dust accumulation and long-term exposure to sunlight and avoid their damage. The pipes and fittings must not be exposed to direct UV radiation during storage or after installation, to avoid degradation of its physical and chemical properties affecting also its long-term performance. The system is designed mainly for covered installation.



#### PIPE WELDING





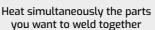


its axis

end of the pipe

Cut the pipe perpendicularly to Mark the welding depth at the Clean with a clean cloth or fibre free napkin







Joint them immediately without rotating until the marked welding depth is covered

## **Useful** information

When using fittings with metal thread, special attention should be given to the choise of all other metal elements of the installation, in order to avoid galvanic corrosion. Fittings should therefore be made only with the appropriate metal threads.

Threads should not be used for sealing and a suitable liquid sealant is recommended. Teflon can also be applied, but in the right quantity. In both cases the excessive pressure on the thread must be avoid.

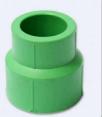


## **GUARANTEE**

Guaranteed for 10 years constant operation in cold and hot water systems under pressure. The guarantee covers product liability and possible damages to third installations up to 2.000.000€ per event and cumulatively on an annual basis.

## **FITTINGS**









SOCKET F

REDUCER M-F

ELBOW 90° F-F

**FLBOW 45° F-F** 





**EQUAL TEE** 

REDUCING TEE

BEND

LONG BYPASS BEND



**FEMALE THREAD** 







ELBOW 90° ELBOW 90° **FEMALE THREAD** 









TEE FEMALE THREAD

TEE MALE THREAD

**END CAP** 

PLUG FOR PRESSURE TEST









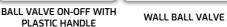
END CAP MALE

SINGLE BRACKET

WELDING MACHINE

WELDING MACHINE









LONG AXIS BALL VALVE

CONCEALED VALVE