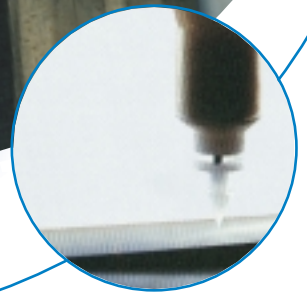




# ® ISOGENOPAK

the efficient and cost-saving  
jacketing material for insulated pipes



## MATERIAL CHARACTERISTICS

®ISOGENOPAK is a special rigid PVC film for jacketing of insulated pipes. A dry, clean fitting is guaranteed. The inherent curl makes it the ideal material for quick and easy covering.

®ISOGENOPAK is self-extinguishing and has considerable resistance to acids, alkalis, salts, oil, petrol, aliphatic hydrocarbons and corrosive atmospheres. In addition, the material cannot corrode and is virtually impermeable to water vapour. It is unaffected by fresh and salt water and is impervious to gases, grease and oil.

The chemical characteristics of ®ISOGENOPAK are matched by equally good physical characteristics: high longitudinal and lateral tear resistance, high elasticity and shock resistance.

®ISOGENOPAK is very light: one square metre, 0.350 mm thick, weighs only about 500 g. This low weight and ease of stacking facilitates transportation and storage.

Physiologically harmless, ®ISOGENOPAK has a light grey smooth surface which guarantees a longlasting elegant appearance. It requires no care or maintenance and also has very good antistatic characteristics.

The material has considerable resistance to temperature changes and is stable from -20°C up to + 65°C in indoor use. The thermal conductivity  $\lambda$  of ®ISOGENOPAK is 0.16 W/mK.

### Chemical resistance ensures long product life

Material	Temp. °C	Resistance	Material	Temp. °C	Resistance
Acetaldehyde up to 40 %, aqueous	20	▶	Sodium chloride	40	●
Acetone, aqueous	20	○	Carbon monoxide, 100 %, gaseous	60	●
Aldehyde, 100 %	20	○	Methyl alcohol, every conc.	40	●
Aluminium salts	40	●	Mineral oils	60	●
Ammonia, aqueous	40	●	Sodium hydroxide, 60 %, aqueous	60	●
Ammonia, gaseous	60	●	Mercury	60	●
Benzene (pure aliphatic hydrocarbons)	60	●	Nitric acid, diluted, aqueous 30–50 %	50	●
Benzene-benzole mix (fuel)	20	○	50–65 %	20	●
Chlorine, gaseous (> 1 %), wet	20	▶	98 %	20	○
Chlorine, gaseous, dry	20	▶	Hydrochlorid acid, aqueous up to 30 %	60	●
Hydrogen chloride, dry	60	●	Hydrogen, gaseous	60	●
Iron salts, diluted solutions	40	●	Sulphur dioxide, gaseous (wet)	40	●
saturated solutions	60	●	gaseous (dry)	60	●
Acetic acid, 25–60 %	60	●	Sulphoric acid, 40-80 %	60	●
Ethyl alcohol, solutions	40	●	80-90 %	40	●
96 %	60	▶	96 %	20	●
Glycerine	60	●	96 %, fuming	60	▶
Potassium hydroxide solution, 50 %	60	●	Carbon tetrachloride	20	▶
Potassiferous salts	40	●	Hydrogen, gaseous	60	●

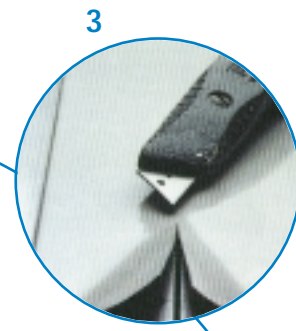
Key: ○ = not resistant; ▶ = resistant under certain conditions; ● = resistant



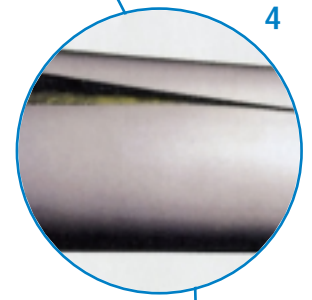
Fitting of a premoulded bend



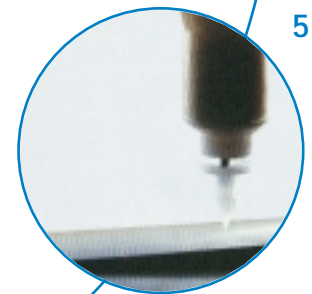
T-section



Cutting of <sup>®</sup>ISOGENOPAK with a guide rail



Fitting of <sup>®</sup>ISOGENOPAK to a straight section



Closing longitudinal seams with plastic push-in rivets



Longitudinal seam closed with special solvent-based adhesive

## MOUNTING INSTRUCTIONS

Precurled <sup>®</sup>ISOGENOPAK jacketing film is supplied in rolls of 35 m in length with 1000 mm as the most common width. The <sup>®</sup>ISOGENOPAK-system is completed by a large variety of premoulded bends, T-sections, caps and cuffs.

First the insulant must be attached to the pipe without gaps. When using mineral wool sections, loose fill wool can be used to cover the bends and other shapes. The insulant has to be affixed to the pipe consistently.

To attach the <sup>®</sup>ISOGENOPAK jacketing we advise to start with the moulded pieces, e. g. bends (1) and T-sections (2).

For straight sections <sup>®</sup>ISOGENOPAK is cut from the roll according to the circumference to be clad. Allow an extra 20-30 mm for overlapping. A guide rail for the cutter (3) has proven its worth.

Because of the precurling <sup>®</sup>ISOGENOPAK clings around the insulated pipe (4) almost by itself. Just little additional adjustment is required. The circumferential seams should overlap by about 20-30 mm as well.

<sup>®</sup>ISOGENOPAK is fixed along the longitudinal seams either by using plastic push-in rivets in distances of about 150 mm (5) or special solvent-based adhesive continuously along the seams (6).

The information provided here is consistent with the state of our knowledge at the time of printing. If required request an up-to-date version of this publication. No representation of warranty is made for specific product properties or concrete applications. Industrial property rights must be observed. We warrant full product quality under the terms of the General Terms of Delivery and Payment of KLOCKNER PENTAPLAST GmbH & Co.KG. - 2/02

Technical data			
Characteristic	Value	Unit	Measuring Method
Moisture resistance factor $\mu$	app. 60 000	--	DIN 52615
Impact strength	$\geq 400$	kJ/m <sup>2</sup>	DIN EN ISO 8256
Tensile strength	> 35	N/mm <sup>2</sup>	DIN EN ISO 527
Elasticity modulus	app. 1800	N/mm <sup>2</sup>	DIN EN ISO 527
Linear heat expansion coefficient	$0.9 \times 10^{-4}$	1/K	Leitz-Dilatometer
Emissivity $\epsilon$	97	%	ISO 10292-A





ISOGENOPAK

## SERVICE INTERNATIONAL

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