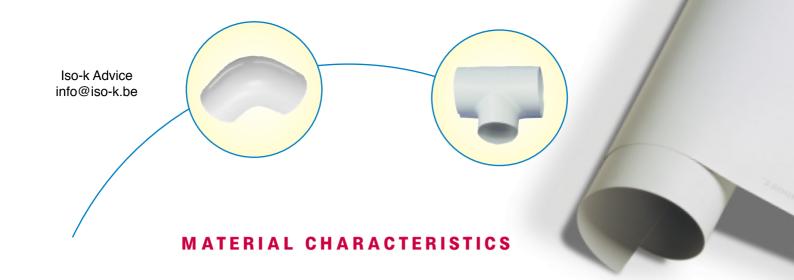


# **®ISOGENOPAK**

Iso-k Advice info@iso-k.be

the efficient and cost-saving jacketing material for insulated pipes





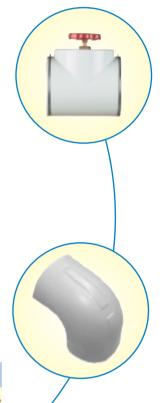
 ISOGENOPAK is a special rigid PVC film for jacketing of insulated pipes. A dry, clean fitting is guaranteed.
The inherent curl makes it the ideal material for quick and easy covering.

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, <sup>®</sup>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.



| Material                             | Temp. °C | Resistance | Material                              | Temp. °C | Resistance |
|--------------------------------------|----------|------------|---------------------------------------|----------|------------|
| Acetaldehyde up to 40 %, aqueous     | 20       |            | Sodium chloride                       | 40       | •          |
| Acetone, aqueous                     | 20       | О          | Carbon monoxide, 100 %, gaseous       | 60       | •          |
| Aldehyde, 100 %                      | 20       | О          | Methyl alcohol, every conc.           | 40       | •          |
| Aluminium salts                      | 40       | •          | Mineral oils                          | 60       | •          |
| Ammonia, aqueous                     | 40       | $\bullet$  | Sodium hydroxide, 60 %, aqueous       | 60       | •          |
| Ammonia, gaseous                     | 60       | $\bullet$  | Mercury                               | 60       | •          |
| Benzene (pure aliphatic hydrocarbons | ) 60     | •          | Nitric acid, diluted, aqueous 30–50 9 | % 50     | •          |
| Benzene-benzole mix (fuel)           | 20       | О          | 50–65 '                               | % 20     | •          |
| Chlorine, gaseous (> 1 %), wet       | 20       |            | 98 %                                  | 20       | О          |
| Chlorine, gaseous, dry               | 20       |            | Hydrochlorid acid, aqueous up to 30 % |          | •          |
| 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 %               |          | •          |
| Ethyl alcohol, solutions             | 40       | •          | 80-90 %                               | 40       | •          |
| 96 %                                 | 60       |            | 96 %                                  | 20       | •          |
| Glycerine                            | 60       | $\bullet$  | 96 %, fuming                          | 60       |            |
| Potassium hydroxide solution, 50 %   | 60       | $\bullet$  | Carbon tetrachloride                  | 20       |            |
| Potassiferous salts                  | 40       | •          | Hydrogen, gaseous                     | 60       | •          |

#### Chemical resistance ensures long product life

Key:  $O = not resistant; \mathbf{D} = resistant under certain conditions; \mathbf{O} = resistant$ 

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1

Carl

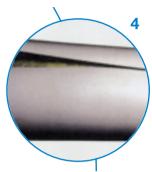
T-section

2



Cutting of ®ISOGENOPAK with a guide rail

#### MOUNTING INSTRUCTIONS



Fitting of ®ISOGENOPAK to a straight section





Closing longitudinal seams with plastic push-in rivets

Longitudinal seam closed with special solvent-based adhesive

| Technical data                    |                        |                   |                   |  |  |  |
|-----------------------------------|------------------------|-------------------|-------------------|--|--|--|
| Characteristic                    | Value                  | Unit              | Measuring Method  |  |  |  |
| Moisture<br>resistance factor µ   | app. 60 000            |                   | DIN 52615         |  |  |  |
| Impact strength                   | ≥ 400                  | kJ/m²             | 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 x 10 <sup>-4</sup> | 1/K               | Leitz-Dilatometer |  |  |  |
| Emissivity E                      | 97                     | %                 | ISO 10292-A       |  |  |  |

Fitting of a premoulded bend

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 cladded. 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.

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 cencrete applications. Industrial property rights must be observed. We warrant full product quality under the terms of the General Terms of Delivery and Payment of KLÖCKNER PENTAPLAST GmbH & Co.KG. - 2/02





### SERVICE INTERNATIONAL

## **KLÖCKNER PENTAPLAST GmbH & Co.KG**

#### Infoline Gendorf Marketing & Technical Service <sup>®</sup>ISOGENOPAK

Werk Gendorf Postfach D-84504 Burgkirchen

Tel. ++49/8679/75510 Fax ++49/8679/75091 Internet: www.isogenopak.com



