

EcoPearl[®] VP.PU 22HK84 D

General Properties and Applications

EcoPearl VP.PU 22HK84 D is a polyol formulation used to produce rigid polyurethane foam for the insulation of composite pipes for district heating systems. It is a CO₂-blown system which contains all the auxiliaries necessary for processing. EcoPearl VP. PU 22HK84 D is designed for processing at a broad range of production temperatures.

The thermal lifetime of the basic polyol composition of the EcoPearl VP.PU 22HK84 D product family has been tested in composite district heating pipe application, where it is approved according to EN 253.

The catalyst package insures optimal flowability of the system and gives thus a very good density distribution. The use of special surface-active additives gives a fine cell structure, good mechanical properties and the best possible adhesion on all usual construction materials. The system contains no halogenated blowing agents as water (CO₂) is used as the only blowing agent. Thus the PU-system has zero ozone depletion potential (ODP=0) and (GWP=1).

Sampling

The polyol formulation should first be homogenised. Moisture access should be prevented when taking product samples.

Specification

Property	Value	Unit of measurement	Method
Hydroxyl number	355 ± 20	mg KOH/g	2201-0211001-90D
Water content	4.00 ± 0.25	%	2201-0212401-90D
Viscosity 25 °C	450 ± 70	mPa·s	2201-0212101-90D

Other Data*

Property	Value	Unit of measurement	Method
Density 25°C	approx. 1.07	g/cm ³	DIN 51757
pH value	approx. 9.5		2201-0240101-92D

* These values provide general information and are not part of the product specification

Packaging

In drums, road tankers, tank containers or IBCs on request.

Baytherm[®] VP.PU 22HK84 D

Storage

Shelf life (from date of delivery): 6 months if stored in sealed, moisture-tight containers.

Storage temperature: 15 to 25 °C

Labeling and REACH applications

This product data sheet is only valid in conjunction with the latest edition of the corresponding Safety Data Sheet. Any updating of safety-relevant information – in accordance with statutory requirements – will only be reflected in the Safety Data Sheet, copies of which will be revised and distributed. Information relating to the current classification and labeling, applications and processing methods and further data relevant to safety can be found in the currently valid Safety Data Sheet.

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Directions for Processing

Guide formulation

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System Iso[®] 44V20 L

MDI-Index 120

Hand-mixing with the product at a temperature of 20 ± 0.5 °C and stirring at a speed of 1,000 rpm gives the following values:

Stirring time	15	Seconds
Cream time	approx. 40	Seconds
Gel time	approx. 200	Seconds
Free-rise density	approx. 37	kg/m ³

Parts per weight

100

173

The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance, information and recommendations to determine to your own satisfaction whether our products, technical assistance and information are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by Covestro. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale which are available upon request. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance, and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with any claim of any patent relative to any material or its use. No license is implied or in fact granted under the claims of any patent.

This product is not designated as „Medical Grade“ (1) and therefore shall not be considered a candidate for the manufacture of a medical device or of intermediate products for medical devices, which are intended under normal use to be brought into direct contact with the patient's body (e.g., skin, body fluids or tissues, including indirect contact to blood)*. [This product is also not designated for Food Contact (2), including drinking water, or cosmetic applications. If the intended use of the product is for the manufacture of a medical device or of intermediate products for medical devices, for Food Contact products or cosmetic applications Covestro must be contacted in advance to provide its agreement to sell such product for such purpose.] Nonetheless, any determination as to whether a product is appropriate for use in a medical device or intermediate products for medical devices, for Food Contact products or cosmetic applications must be made solely by the purchaser of the product without relying upon any representations by Covestro.

1) Please see the "Guidance on Use of Covestro Products in a Medical Application" document.

2) As defined in Commission Regulation (EU) 1935/2004.

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