



# BPD2142

## Product Technical Information

BPD2142 is an unstabilised low density polyethylene.

This material, when compounded with suitable additives, is designed for use in silane crosslinking processes. Its melt flow rate allows it to be processed with the two main silane technologies:

Monosil® (one-step process) and Sioplas® (two-step process).

It has been developed for insulation of power cables up to 5 kV.

## Specification

BPD2142 meets the following material specification:

- ISO 1872/1:PE, KGN, 27
- D012 ASTM 1248: Type 2,
- Class A, Cat. 4

## Regulations and approvals

Power cables insulated with BPD2142 meet most national and international specifications, in particular IEC 60502 - 1/2. Information concerning suitability to a given specification is available from INEOS.

## Packaging

BPD2142 is sold in pellet form and is available in the following packages: 25 kg bags, 1.1 ton holbins and bulk tankers.

## Processing Data

BPD2142 is widely used for silane crosslinked LV insulation, usually with the two-step process. The processing parameters depend on the additives introduced by the user (antioxidants), and also the grafting machine (first step) and the extrusion machine (second step). Usually, 1.5 - 1.8 % of a vinyltrimethoxysilane blend is added to BPD2142 during the grafting step. A predrying step is not needed for this material.

Properties	Test Method	Value <sup>(1)</sup>	Units
<b>Physical</b>			
Melt flow rate	ISO 1133 Cond. D	1.0	g/10min
Conventional density conditioning ISO 1872/1	ISO 1183 Method D	930	kg/m <sup>3</sup>



# BPD2142

BPD2142 when grafted in the laboratory with 1.5 % of a suitable silane/peroxide mixture and with subsequent addition of a tin condensation catalyst, typically gives the following results on a 1.5 mm thick tape after curing overnight in water at 80 °C.

Properties		Test Method	Value <sup>(1)</sup>	Units
Tensile strength	@ break	IEC 811-1-1	17	MPa
Elongation	@ break	IEC 811-1-1	350	%
Heat elongation		IEC 811-2-1	60	%
200 °C, 15 min, 20 N/cm <sup>2</sup>				

(1) Data should not be used for specification work.

## Regulatory Information

The product and uses described herein may require global product registrations and notifications for chemical inventory listings, or for use in food contact or medical devices. For further information, send an email to [psnohreg@ineos.com](mailto:psnohreg@ineos.com). Unless specifically indicated, the products mentioned herein are not suitable for applications in the medical or pharmaceutical sector.

## Health and Safety Information

The product described herein may require precautions in handling. The available product health and safety information for this material is contained in the Material Safety Data Sheet (MSDS) that may be obtained from the website [www.ineospolyolefins.com](http://www.ineospolyolefins.com). Before using any material, a customer is advised to consult the MSDS for the product under consideration for use.

## Exclusion of Liability

Although INEOS O&P Europe endeavours to ensure that all information and advice relating to our materials or other materials howsoever provided to you by INEOS O&P Europe is accurate and up to date, no representation or warranty, express or implied is made by INEOS O&P Europe as to its accuracy or completeness. All such information and advice is provided in good faith and INEOS O&P Europe is not, to the maximum extent permitted by law, liable for any action you may take as a result of relying on such information or advice or for any loss or damage, including any consequential loss, suffered by you as a result of taking such action.

In addition data and numerical results howsoever provided to you by INEOS O&P Europe are given in good faith and are general in nature. Data and numerical results are not and shall not be regarded as specifications and as such INEOS O&P Europe is not, to the maximum extent permitted by law, liable for any action that you take as a result of relying on such data and results or for any loss or damage, including any consequential loss, suffered by you as a result of taking such action.

It remains at all times your responsibility to ensure that INEOS O&P Europe materials are suitable for the particular purpose intended and INEOS O&P Europe shall not be responsible for any loss or damage caused by misuse of INEOS O&P Europe products. To the maximum extent permitted by law, INEOS O&P Europe accepts no liability whatsoever arising out of the application, adaptation or processing of the products described herein, the use of other materials in lieu of INEOS O&P Europe materials or the use of INEOS O&P Europe materials in conjunction with such other materials.