

Product Data Sheet

Spec Number: IT120893 (Unslit - Qualification)

SmartSolve 2PN30 Heat Seal Material

Product Description:

SmartSolve 2PN30 Heat Seal Material, is a highly water-soluble paper useful in many pouching applications with its water-soluble design and heat seal coating.

The material is intended for food packaging with no barrier to oxygen or water vapor.

Features & Limitations:

Dissolves easily and completely in any water temperature.

Excellent Print Characteristics.

Contains a heat seal coating that allows product to be converted into a pouch.

Unit of Measure: MSI

Country of origin: USA

Paper Layer	Units	Typical Values
Paper Caliper	Microns	49
	Mils	1.9
Paper Basis Weight	GSM	30.1

Heat Seal Layer	Units	Typical Values
Heat Seal Thickness	Microns	31
	Mils	1.2
Heat Seal Basis Weight	GSM	37.9

Overall Composite	Units	Typical Values
Caliper	Microns	80.1
	Mils	3.2
Basis Weight	GSM	68.0
	lb./3,000ft ²	41.8
Dispersibility	6-7 seconds	
Tensile Strength MD	kN/m	2
	lbf/in	10

Heat Seal Settings	Units	Suggested Range	
		Min	Max
Seal Temperature	°F	320	356
	°C	160	180
Seal Pressure	PSI	45	55
	kPa	310	379
Seal dwell time	Sec.	0.5	

Seal Type	Units	Typical Range
Permanent Seal (ASTM F 2029)	lb/in	N/A - Seal Strength is greater than paper strength
	kg/m	N/A - Seal Strength is greater than paper strength

Regulatory Requirements:

100% Bio-Based; No Micro Plastics; Direct Food Contact; Zero Waste; Safe for Drains, Flushable***; Non-ecotoxic; Marine Biodegradation; Readily Biodegradable***; Free of pathogenic micro organisms; Recyclable***; FSC-Mix; No PFAS, BPA, or Phthalates***; REACH Compliant

* Temperature may impact speed of dispersibility.

** Call customer service for details and printer recommendations.

*** Validation in progress.

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**APPLICATION OF SMARTSOLVE'S STANDARD TERMS AND CONDITIONS OF SALES:
EXCEPT AS EXPLICITLY STATED THEREIN, ALL SALES OF SMARTSOLVE'S MATERIALS OR PRODUCTS SHALL BE GOVERNED BY
SMARTSOLVE'S STANDARD TERMS AND CONDITIONS OF SALES, WHICH ARE SET FORTH IN FULL AT: <https://smartsolve.com/terms-conditions/>**

Shipping and Storage Conditions

Raw Materials

SmartSolve water-soluble materials should be thoroughly shrink wrapped for shipping and storage prior to converting into finished products.

Finished Product

It is recommended that finished products produced from SmartSolve water-soluble materials be shrink wrapped for shipping to end customers, and remain shrink wrapped until actual use of the product.

Each product contains a unique batch number.

Environmental Conditions

SmartSolve water-soluble materials should be stored in a temperature and humidity-controlled environment. The proper storage conditions are between 50°F and 70°F and 30RH and 70RH (relative humidity). Materials stored outside of these ranges can decrease the expected performance of the product. Prolonged exposure to direct light may alter visual appearance.

Product Use

All statements, technical information and data contained in Product specifications, descriptions or other documents are based upon tests or experiences that SmartSolve believes are reliable. However, many factors beyond SmartSolve's control can affect the use and performance of a Product in a particular application, including the conditions under which the Product is used and the time and environmental conditions in which the Product is expected to perform. Since these factors are uniquely within the Customer's or other end-user's knowledge and control, it is essential that the Customer or other end-user evaluate the Product to determine whether it is fit for a particular purpose and suitable for the Customer's or other end-user's specific application(s), and SmartSolve does not warrant that the Product is fit for a particular purpose or suitable for a specific application, unless otherwise stated by SmartSolve in a writing signed by an authorized representative of SmartSolve.



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Warranty and Limitations:

Unless explicitly stated otherwise in a sales agreement, or SmartSolve's sales proposal, quotation or other product literature, SmartSolve makes no warranty (including any implied warranty arising out of a course of dealing, custom or usage of trade) regarding the product and the product is sold "as is". SmartSolve warranties do not apply if the product fails or is damaged as a result of: customer's willful damage, negligence, or abnormal working conditions; customer's failure to follow SmartSolve's instructions (whether oral or in writing); customer's misuse, alteration or repair of the product without SmartSolve's approval; or a malfunction caused by any equipment not supplied by SmartSolve or on SmartSolve's behalf. In addition, SmartSolve's warranties do not apply during any period in which customer has outstanding any payment due SmartSolve beyond the due date. Except as expressly provided in a sales agreement, or SmartSolve's sales proposal, quotation or other product literature, SmartSolve will not be liable for any loss or damage arising from or caused by the product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability. If the product is defective or otherwise fails to meet warranty standards within the applicable warranty period, the customer's exclusive remedy and SmartSolve's sole obligation will be, at SmartSolve's option, to replace the product or refund the purchase price. Any judicial action by the customer relating to products shall be brought within one year of the date of tender of delivery of the products.

Last Updated 09/12/2025