

## SABIC SOLUTION FOR CROSS LAMINATED TARPAULIN



### CHALLENGES IN THE INDUSTRY

- Excellent sealing performance of sealing layer is needed for two film bonding
- Good processability to increase productivity
- Stronger thermomechanical bonding of two or more films
- Competition from HDPE raffia tarpaulin

### PROCESS STEPS

**Step 1:** Co-Extruded Blown Film - A-B-C structure - Molecular orientation in machine direction. This is a three-layer film in which SABIC® COHERE™ 8170D is used in sealing layer.

**Step 2:** Film bubble cut at 45° angle.

**Step 3:** Two or four layers of the spiral cut films with orientation at opposite angles are laminated together.

### PRODUCT OFFERING

GRADE	Melt Index (g/10min)	Density (g/cm <sup>3</sup> )	FEATURES
SABIC® COHERE™ 8170D	1.0	0.868	Excellent sealing, low SIT and dart impact resistance
SABIC® SUPEER™ 8115	1.0	0.915	Excellent mechanical strength and processability
SABIC® LLDPE 118NJ	1.0	0.918	Very good mechanical strength in tensile and puncture resistance
SABIC® HDPE F00952	0.05 9 (MI 21)	0.952	Excellent processability and mechanical strength
SABIC® HDPE F01552	0.15 16 (MI21)	0.952	Excellent processability & drawdown properties
SABIC® HDPE F00851	0.3 (MI5) 9 (MI21)	0.952	Excellent processability, high film strength and rigidity

# SABIC SOLUTION FOR CROSS LAMINATED TARPAULIN

## VALUE PROPOSITION

FEATURES	BENEFITS
Superior sealing performance	<ul style="list-style-type: none"> <li>• Lower SIT</li> <li>• Excellent sealing properties</li> <li>• Superior bonding of two / more films</li> </ul>
Excellent Mechanical properties	<ul style="list-style-type: none"> <li>• Better tensile strength, elongation and tear resistance.</li> <li>• Balanced tear resistance in MD &amp; TD</li> <li>• Very good Dart Impact Strength</li> </ul>

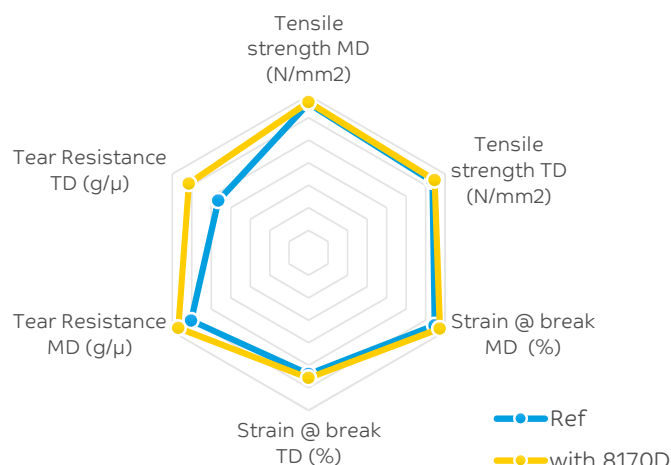
## FORMULATION GUIDELINE FOR 3 LAYERS BLOWN FILM \*

Skin	SABIC® SUPEER™ 8115 + SABIC® LLDPE 118NJ
Core	SABIC® HDPE F00952 / SABIC® HDPE F01552 / F00851 + SABIC® LLDPE 118NJ
Sealing	SABIC® LLDPE 118NJ + COHERE 8170D

\* Above formulation is for guideline only. It may change from customer to customer depending on the property requirement.

Mechanical properties of cross-laminated tarpaulin sample with 8170D in sealing layer in comparison with reference tarpaulin sample:

### Mechanical Properties Comparison



### Applications of Cross laminated tarpaulin:

- Transportation and Industrial applications
- Pond Liner / Pond cover
- Drying of Agriculture products
- Grain or Silage Cover
- Green house application
- Temporary shelter

DISCLAIMER: Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NON-INFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right. SABIC and brands marked with ™ are trademarks of SABIC or its subsidiaries or affiliates, unless otherwise noted.

© 2019 Saudi Basic Industries Corporation (SABIC). All Rights Reserved.

Any brands, products or services of other companies referenced in this document are the trademarks, service marks and/or trade names of their respective holders.