



# FPT300F

## Homopolymer Polypropylene

- Good Mold Release, Excellent Part Finish (Low Bloom)
- Suggested Uses Include Housewares, Caps and Closures, Mugs / Cups, Thin-Walled Containers

Property	Units	Typical Value	Test Method
Nominal Melt Flow Rate (230°C/2.16kg)	g/10 min	30	ASTM D1238
Tensile Strength at Yield (2 in/min, 50 mm/min)	psi MPa	4,800 33	ASTM D638
Elongation at Yield (2 in/min, 50 mm/min)	%	10	ASTM D638
Flexural Modulus (0.05 in/min, 1.3 mm/min, 1% secant)	psi MPa	200,000 1,379	ASTM D790A
Notched Izod Impact Strength at 23°C	ft-lbs/in J/m	0.7 37	ASTM D256A
Rockwell Hardness	R	104	ASTM D785

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For cautions and other information relating to handling of  
and exposure to this product, please see material safety  
data sheet code number C4001 published by Braskem.

550 Technology Drive  
Pittsburgh, PA 15219  
1-800-223-8871

Revision Date: Monday,  
March 23, 2009  
[www.braskem.com](http://www.braskem.com)



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 Plattsburgh NY 12901  
 (518)561-1812  
<https://www.mrpcap.com>

## Product Data Sheet

### MRPWH01 White

#### Product Description

This specification designated by Mold-Rite Plastics covers all colorants that meet the typical value data listed below.

#### Regulatory Compliance

FDA – Title 21 CFR Section 170-199 for Food & Drug Contact  
 RoHS Compliant  
 CONEG/Heavy Metal Compliant  
 Proposition 65 Compliant

Typical Properties	Typical Value
Density	.90
Melt Index	30
Pellets	Standard
Recommended Let Down Ratio	50:1
Carrier Resin	PP
Estimated Heat Stability	450-500 °F
Visual Evaluation	Excellent
Additives	None
DE Tolerance	< 2.00

For further regulatory information, contact Mold-Rite Plastics customer service or sales department.

Notes: These are typical properties not to be construed as specifications. Mold-Rite Plastics reserves that right to include any other colorant that meets that above data values and regulatory requirements.

This product data sheet covers multiple colorant formulations that meet the above typical data values and regulatory requirements. All listed formulas have similar physical, chemical and processing properties. Listed known formulas; Polymer Concentrates – 10536, Penn Color 60W5221

All results were obtained from manufacturer product data sheets (where applicable). The data are intended as a general guide only and do not necessarily represent results that may be obtained elsewhere. The use of Mold-Rite Plastics products must be guided by the users own methods for selection of proper formulation. Mold-Rite Plastics disclaims any responsibility for misuse or miss application of its products. Mold-Rite Plastics liability and customer's exclusive remedy for any claims arising out of sales of its products are expressly limited at customer option for replacement not to exceed the purchase price plus transportation charges thereon in respect to any material which damage is claimed.



# PRODUCT DATA SHEET

## HS 035 HEAT SEAL/20F

MRP Description - (021)HS035.020 R SFYP

### PRODUCT DESCRIPTION

**Description:** A paper-backed aluminum foil coated with a clear heat sealable coating blend of high molecular weight ethylene and vinyl acetate copolymers laminated to polystyrene foam.

**FDA Status:** Complies with Federal Regulations of H.E.W., FDA, sections 175.105, 175.300, 176.170, 176.180, 177.1350, 178.3710, and 182.1. It is entered in SANCAP Liner's food master file FMF 166 and drug master file DMF 2518.

### RECOMMENDED STORAGE CONDITIONS

The material should be stored in well-ventilated area (temp. 60° - 80°F; RH - 40% - 60%). Material and lined closures are heat sensitive. Storage or shipping temperatures should not be in excess of 105°F. Curling, blocking, splitting, or foil separation may result. If material becomes chilled, it should be stored under the recommended conditions until stabilized. Avoid storing closure liner materials over 60 days. Metal foil is prone to corrosion.

### PHYSICAL AND CHEMICAL PROPERTIES

1. **Color** Aluminum
2. **Thickness, mils**
  - a) Overall 22.41 - 28.33
  - b) Heat Seal Coating 1.50 - 3.00
  - c) Aluminum Foil 0.31 - 0.38
  - d) Paper 2.60 - 3.00
  - e) Foam 18.00 - 22.00
3. **Basis Wt. Lbs./Ream 3000 ft.<sup>2</sup>**
  - a) Overall 134.3 - 176.9
  - b) Heat Seal Coating 20.7 - 41.9
  - c) Aluminum Foil 13.3 - 16.2
  - d) Paper 33.3 - 36.8
  - e) Foam 67.0 - 82.0
4. **Heat Seal Coating**
  - a) Melting Point °F 150 - 160
  - b) Blocking Point °F 130 - 135
5. **Gas Transmission: cc/cin<sup>2</sup>/24hrs/1atm**
  - a) Oxygen nil
6. **Water Vapor Transmission**
  - a) gm/cin<sup>2</sup>/24hrs/100°F/90%RH Near zero

### SUGGESTED PRODUCT USES

Material is an induction heat sealable tamper indicating innerseal which can be used for over-the-counter drug products on Polyethylene, Glass\*, PET, PVC, Polystyrene, and Polypropylene.

**Dry Products**  
Milk  
Peroxide

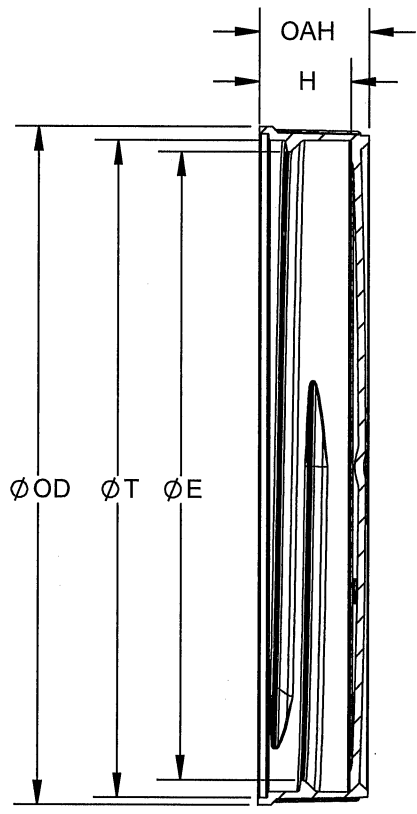
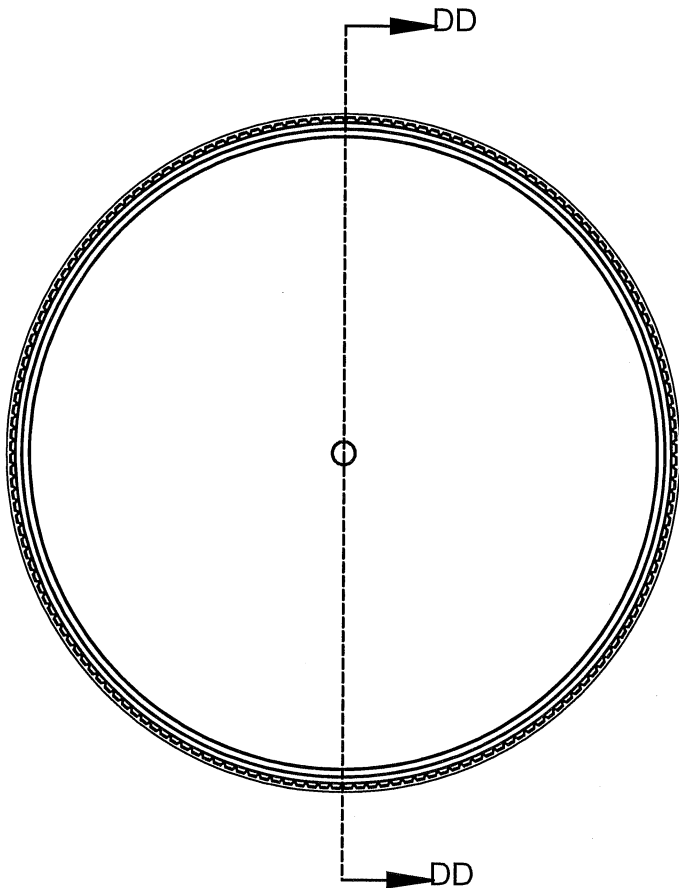
**Fruit Juices**  
Glass Cleaner  
Spices

Product applications listed above are a partial listing and do not cover all suitable applications. These are recommendations for general categories and user must test for suitability for their specific product. Not suitable for products containing oil.

*\*Glass must be treated for proper adhesion.*

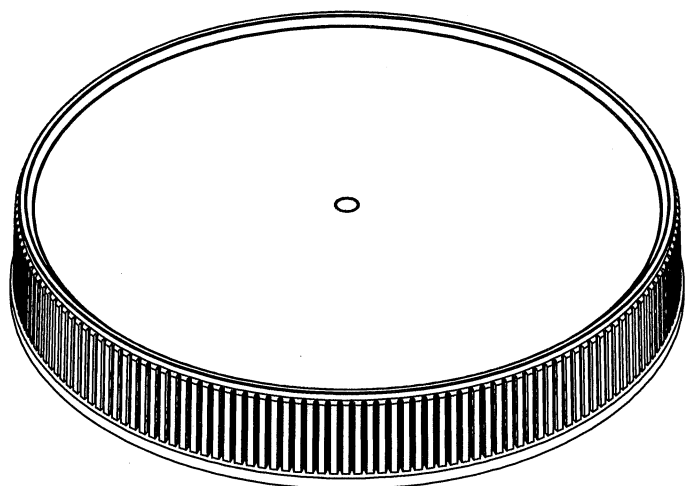
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PRODUCT NAME: HS035 HEAT SEAL/20F  
Rev. 042111



SECTION DD-DD

THREAD DETAIL INFORMATION  
 5 THREADS PER INCH, .200 PITCH,  
 380° FULL DEPTH THREAD



	TOLERANCE	UNITS	
E	± 0.013 [0.33]	in [mm]	3.416 [86.77]
T	± 0.013 [0.33]	in [mm]	3.528 [89.61]
H	± 0.012 [0.30]	in [mm]	0.502 [12.75]
OAH	± 0.012 [0.30]	in [mm]	0.601 [15.27]
OD	± 0.013 [0.33]	in [mm]	3.677 [95.76]
Part Weight	±0.90	g	12.00

Replaces C-4017 89mm-400 RM

**STATIC TORQUE RECOMMENDATION**  
 40-70 in-lbs  
 THIS REQUIREMENT MAY VARY  
 DEPENDING UPON BOTTLE MATERIAL,  
 NECK FINISH, AND CAPPING EQUIPMENT

THE CLOSURE DIMENSIONS  
 DEPICTED ARE THOSE WHICH HAVE  
 GENERALLY BEEN FOUND TO BE FUNCTIONAL  
 BASED ON INDUSTRY EXPERIENCE BECAUSE  
 OF VARIABILITY IN GLASS AND PLASTIC  
 CONTAINER FINISHES. EACH CLOSURE/FINISH  
 SYSTEM SHOULD BE INDIVIDUALLY EVALUATED  
 AND TESTED TO ENSURE IT MEETS APPLICABLE  
 PERFORMANCE CRITERIA. SEE QUALITY  
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DIMENSIONS ENCLOSED IN ( ) INDICATE REFERENCE DIMENSIONS AND NO TOLERANCE LIMITS ARE ESTABLISHED			
TOLERANCES UNLESS OTHERWISE SPECIFIED			
DIMENSION (inches)	TOLERANCE	DIMENSION (mm)	TOLERANCE
0-0.787	±0.006	0-20	±0.152
0.788-1.181	±0.008	21-30	±0.203
1.182-2.756	±0.012	31-70	±0.305
2.757-3.937	±0.016	71-100	±0.406
3.938-5.096	±0.020	101-150	±0.508
5.097-7.874	±0.024	151-200	±0.610
7.875-9.843	±0.032	201-250	±0.813
ANGULAR TOLERANCE ± 2°			
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 Industry Leading Innovation - Unmatched Customer Service

THIRD ANGLE PROJECTION  
 SOLIDWORKS

DISTRIBUTION CODE  
**D**

DRAWING NAME  
**89mm "RX" Closure**

DRAWING NUMBER  
**CQA 10078**

MATERIAL  
**POLYPROPYLENE**

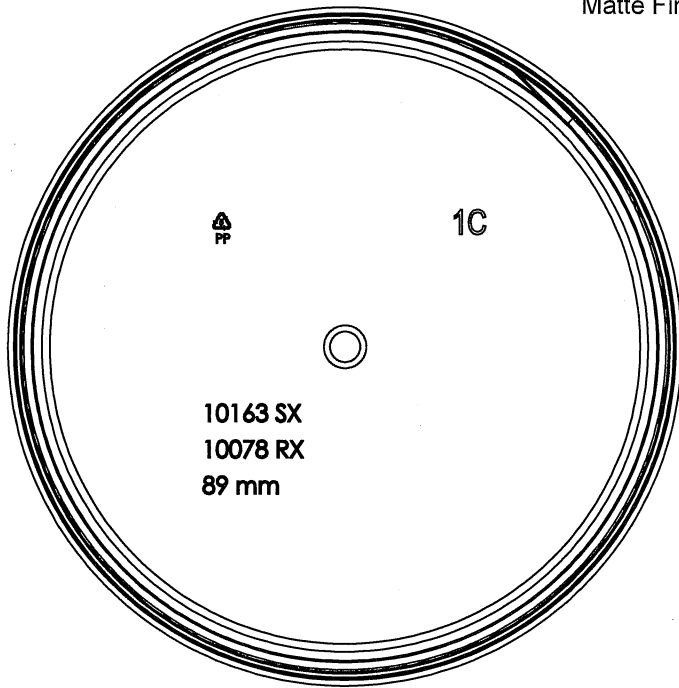
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SCALE	SHEET SIZE	SHEET	REV	N/P
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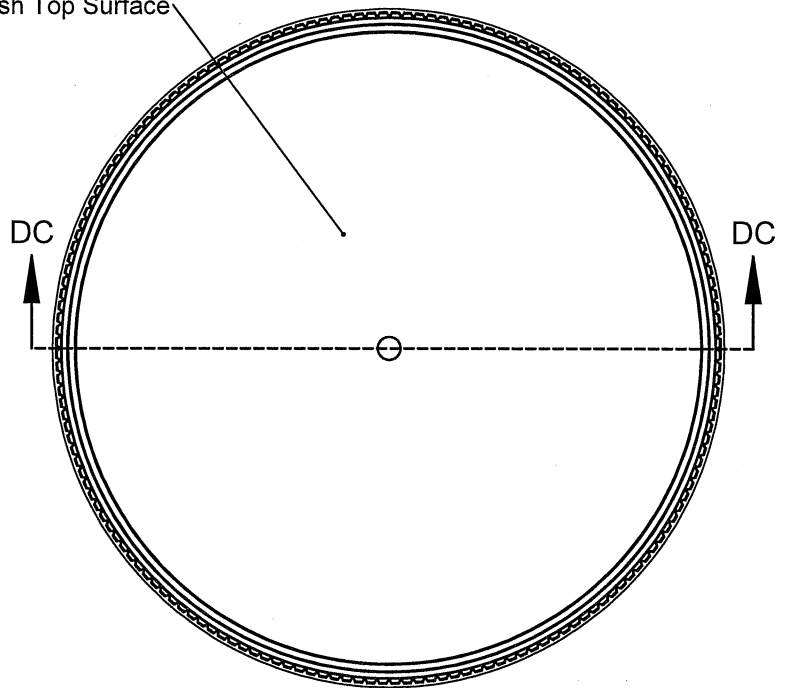
DRAWN BY: BDG 01/16/15

REVISION HISTORY

REV	N/P	DATE	REVISION	DE
05	AA	09/17/15	INITIAL RELEASE	BDG



Matte Finish Top Surface



Nesting Profile



SECTION DC-DC  
SCALE 1 : 1

THE CLOSURE DIMENSIONS DEPICTED ARE THOSE WHICH HAVE GENERALLY BEEN FOUND TO BE FUNCTIONAL BASED ON INDUSTRY EXPERIENCE BECAUSE OF VARIABILITY IN GLASS AND PLASTIC CONTAINER FINISHES, EACH CLOSURE/FINISH SYSTEM SHOULD BE INDIVIDUALLY EVALUATED AND TESTED TO ENSURE IT MEETS APPLICABLE PERFORMANCE CRITERIA. SEE QUALITY ASSURANCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

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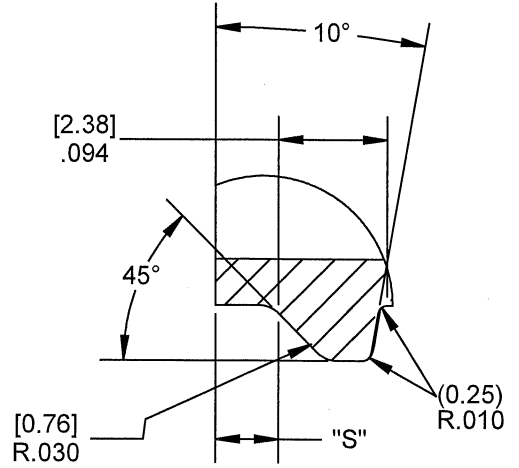
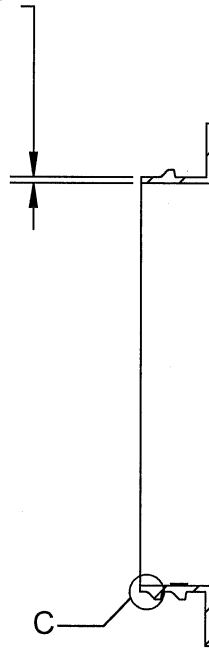
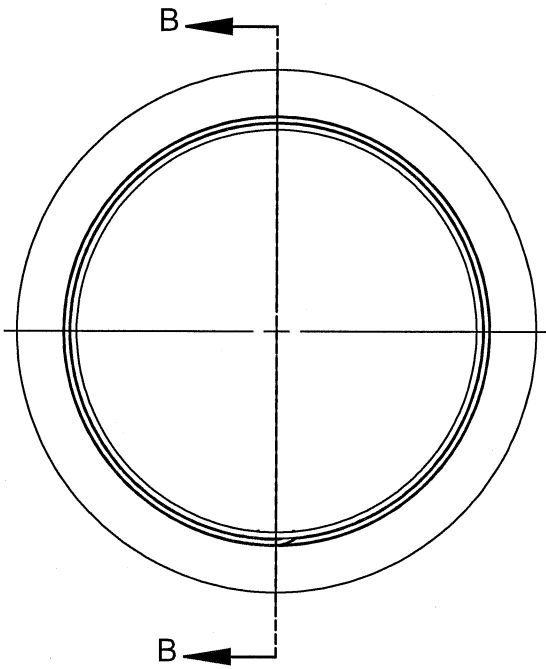
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	D	89mm "RX" Closure
SOLIDWORKS		DRAWING NUMBER
		CQA 10078
		MATERIAL
		POLYPROPYLENE
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		3:2 8½ x 11 2 of 3 05 AA

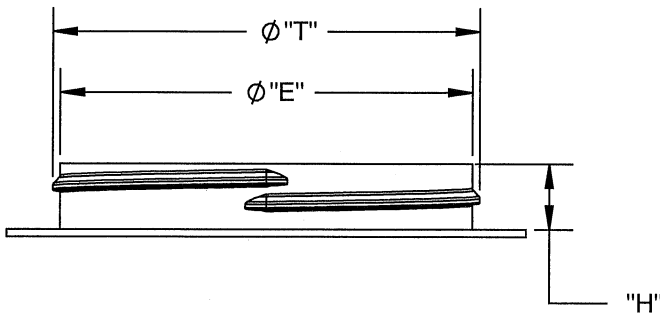
DRAWN BY: REFER TO PAGE 1  
QA APPR: REFER TO PAGE 1  
CUSTOMER APPR: REFER TO PAGE 1

0.050 [1.27] RECOMMENDED FLAT FOR PROPER INDUCTION SEAL



DETAIL C  
SCALE 5 : 1  
THREAD DETAIL

SECTION B-B  
SCALE 1 : 1.5



	TOLERANCE	UNITS	
E	± 0.017 [0.43]	in [mm]	3.374 [85.70]
T	± 0.017 [0.48]	in [mm]	3.494 [88.75]
H	± 0.015 [0.38]	in [mm]	0.535 [13.59]
S	± 0.015 [0.38]	in [mm]	0.060 [1.52]
TPI		in [mm]	0.200 [5.08]
PITCH			5

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