



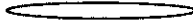
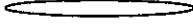
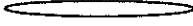
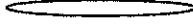
## Product Data Sheet

MRP Description:(A01)MRPLN04.020 FOAM R SFYP

### MRPLN04 – Universal Heat Seal Foam Liner

**Product Description**

This product is a 1 piece universal heat seal consisting of foam backing, paper, aluminum foil and heat seal layer.. This specification, designated by Mold-Rite Plastics, covers all liners that meet the typical value data listed below;

-  Polystyrene Foam
-  Paper
-  Aluminum Foil
-  Heat Seal Coating

**Regulatory Compliance**

FDA Title 21 CFR Section 177.1210 (Closure with Sealing Gaskets for Food Containers,  
 RoHS Compliant  
 CONEG/Heavy Metal Compliant  
 Proposition 65 Compliant

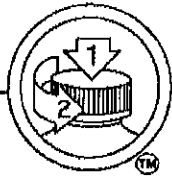
Typical Properties	Typical Value
Overall Thickness	.024 +/- 10%
Drug Master File	16574
Printed	R SFYP
Oxygen Transmission	Essentially Zero
Water Vapor Transmission	Essentially Zero

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 liner that meets that above data values and regulatory requirements.

This product data sheet covers multiple liners that meet the above typical data values and regulatory requirements. All listed liners have similar physical, chemical and processing properties. Listed known liners: HS035, HS 035N, HS205, FS5-8, HSS-5.6

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

### MRPBK01 Black

#### 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
Specific Gravity	.88-.92
Melt Index	Available upon request
Pellets	Standard
Recommended Let Down Ratio	100:1
Carrier Resin	PP
Estimated Heat Stability	320 °F
Visual Evaluation	Excellent
Additives	None
DE Tolerance	< 2.00

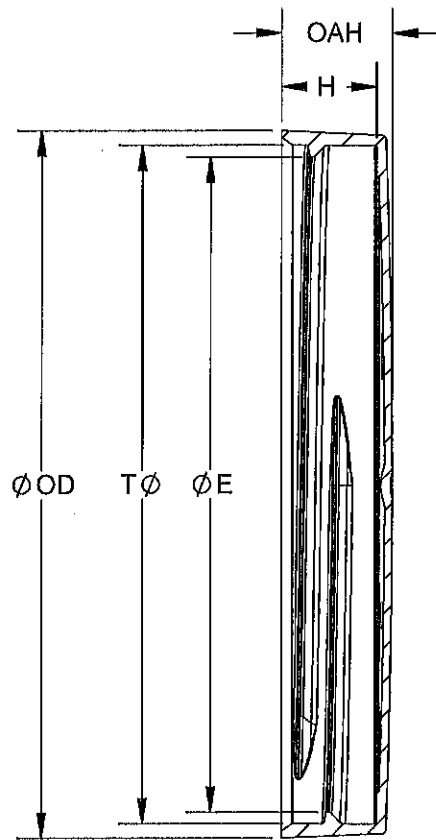
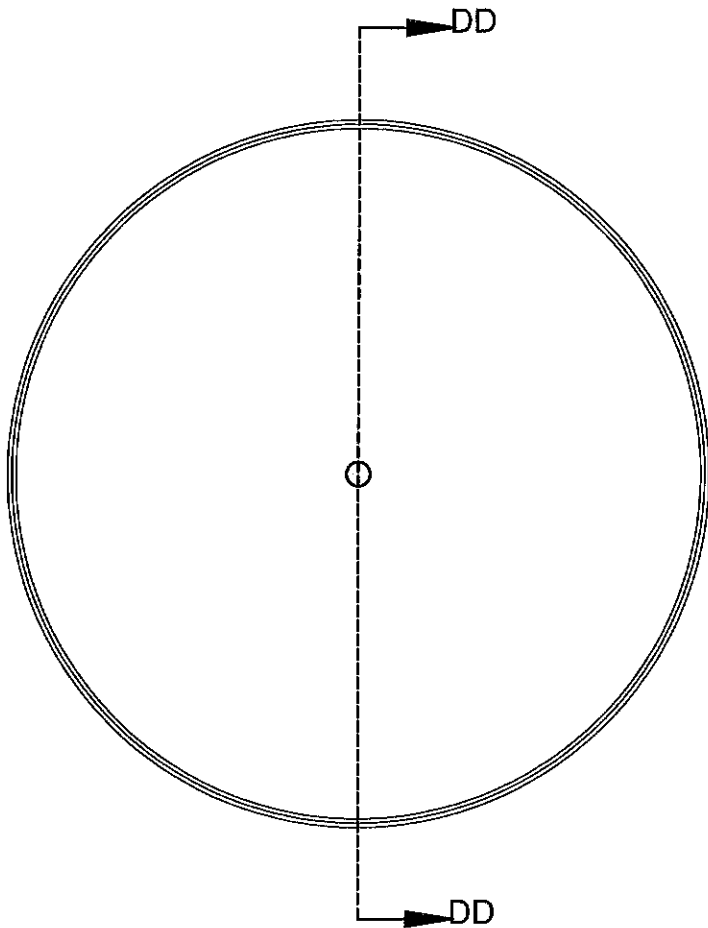
For further regulatory information, contact Mold-Rite Plastics customer service or sales department.

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; PP94620024

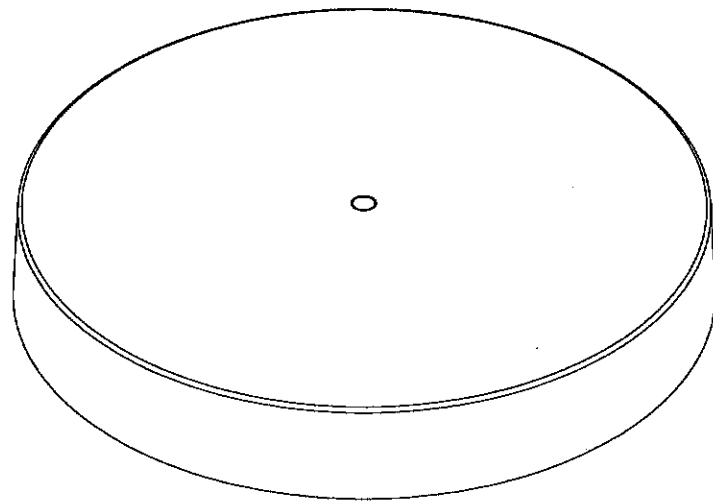
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Revisions- 03/30/10 – Mixing Ratio was corrected to 100:1.



**SECTION DD-DD**

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



REFERENCE	TOLERANCE	DIMENSION	UNITS
E	±.013 [0.33]	3.421 [86.89]	in [mm]
T	±.015 [0.38]	3.535 [89.79]	in [mm]
H	±.012 [0.30]	0.502 [12.75]	in [mm]
OAH	±.020 [0.51]	0.560 [14.22]	in [mm]
OD	±.015 [0.38]	3.690 [93.70]	in [mm]
PART WEIGHT	± 1.10	13.20	g

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

DRAWING TYPE: **CUSTOMER**  
 REPLACES DRAWINGS: \_\_\_\_\_  
 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°

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.

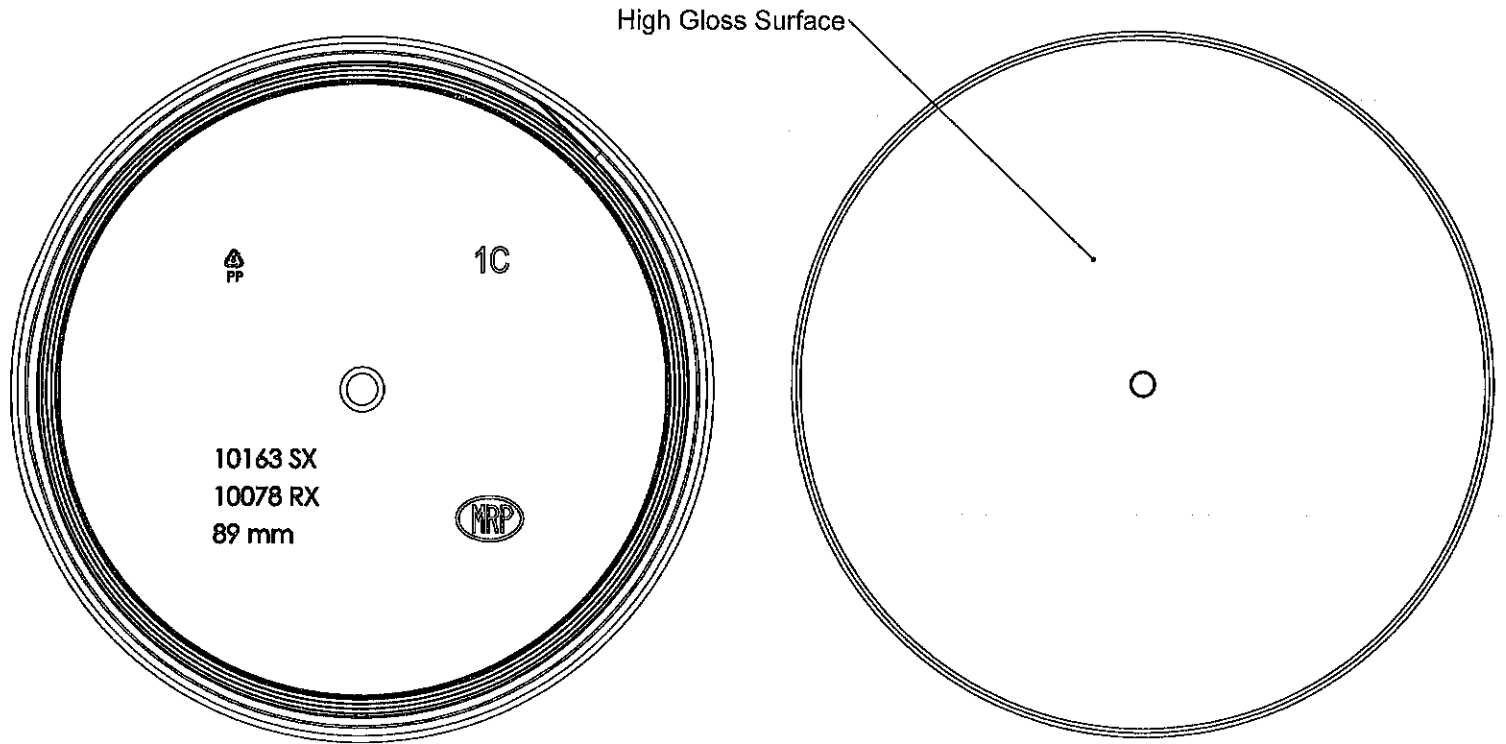
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**MOLD-RITE PLASTICS**  
 Innovative • Reliable • Responsive

<p>THIRD ANGLE          PROJECTION</p>	<p>DISTRIBUTION          CODE</p> <p><b>D</b></p>	DRAWING NAME	89-400 CT Closure SX (Smooth Skirt)	
		DRAWING NUMBER	CQA - 10163	
DRAWN BY:	BDG	5/29/2015	MATERIAL	POLYPROPYLENE
ENG APPR:	BDG	3/30/2017	MODEL NUMBER:	PM 10164 89-400 RX_SX_CT
QA APPR:	DWE	4/5/2017	SCALE	SHEET

DATE	REV	N/P	DESCRIPTION	ENG	DRY N
01/14/15	05	AA	INITIAL RELEASE	BDG	BDC
12/03/15	05	AB	UPDATED SPECIFICATION BASED ON PLATTS VALIDATION (11/24/15)	BDG	BDC
03/02/16	05	AC	UPDATED SPECIFICATION BASED ON SOM VALIDATION (11/24/15)	BDG	BDC
03/09/16	06	AA	ADDED V-GROOVE TO BOTTLE LANDING. UPDATED PART WEIGHT	BDG	BDC
03/30/17	07	AA	ADD CHAMFER AT "T" LOCATION	BDG	BDC



DRAWING TYPE: CUSTOMER			
REFERENCE 89010		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
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ANGULAR TOLERANCE ± 2°			
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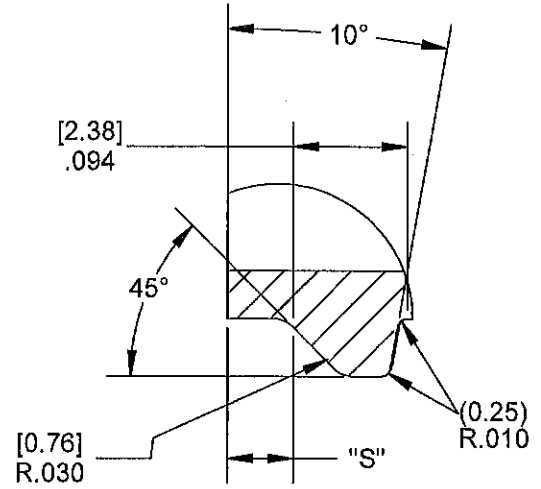
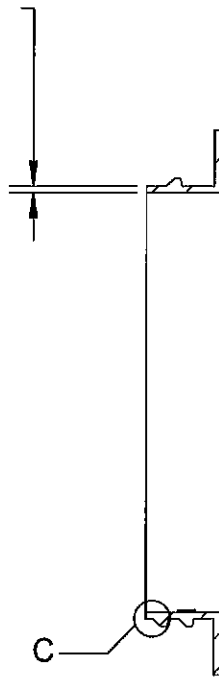
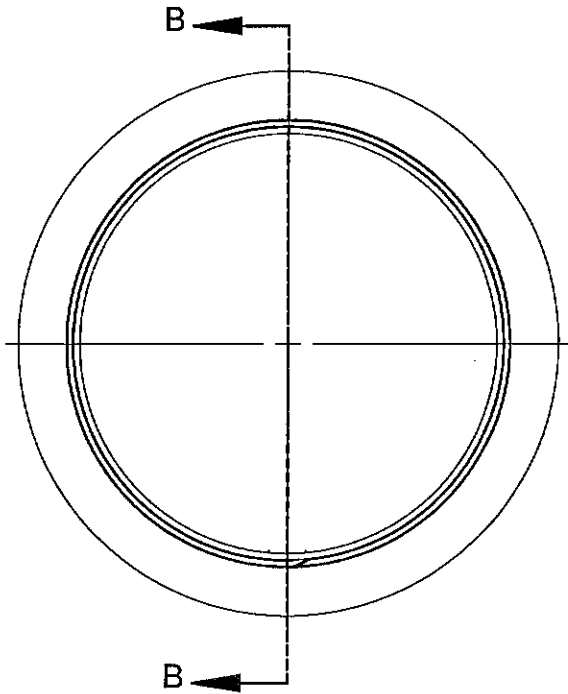


THIRD ANGLE PROJECTION	DISTRIBUTION CODE <b>D</b>	DRAWING NAME 89-400 CT Closure SX (Smooth Skirt)
		DRAWING NUMBER CQA - 10163
		MATERIAL POLYPROPYLENE
DRAWN BY. BDG 5/29/2015		MODEL NUMBER: PM 10164 89-400 RX_SX CT
ENG APPR. BDG 3/30/2017		SCALE 1:2
QA APPR. DWE 4/5/2017		SHEET SIZE 41in x 47in
		SHEET 2 of 2
		REV.NP 07 AA

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.

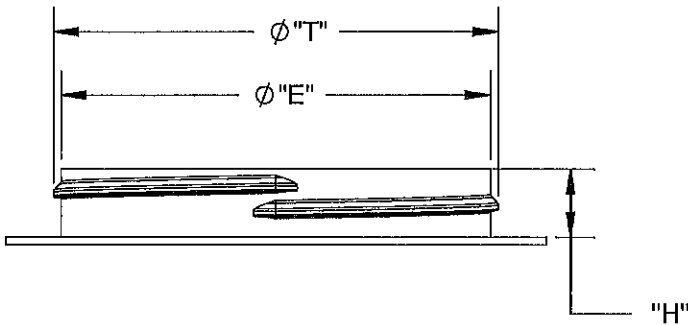
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0.050 [1.27] RECOMMENDED FLAT FOR PROPER INDUCTION SEAL



DETAIL C  
SCALE 5 : 1  
THREAD DETAIL

SECTION B-B  
SCALE 1 : 1.5



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

NOTE: THE NOMINAL ORIENTATION ILLUSTRATED IS BASED ON NOMINAL DIMENSIONS OF BOTH THE CLOSURE AND THE RECOMMENDED NECK FINISH. FOR EXACT ORIENTATION EACH BOTTLE SHOULD BE EVALUATED ON A CASE BY CASE BASIS.

DRAWING TYPE: CUSTOMER

DIMENSIONS ENCLOSED IN ( ) INDICATE REFERENCE DIMENSIONS AND NO TOLERANCE LIMITS ARE ESTABLISHED

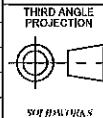
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ANGULAR TOLERANCE ± 2°

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DISTRIBUTION CODE  
**D**

DRAWING NAME  
89-400 CT Closure SX (Smooth Skirt)  
DRAWING NUMBER  
CQA - 10163

DRAWN BY: BDG 5/29/2015  
ENG APPR: BDG 3/30/2017  
QA APPR: DWE 4/5/2017

MATERIAL: POLYPROPYLENE  
MODEL NUMBER: PM 10164 89-400 RX\_SX CT  
SCALE: 1:1  
SHEET SIZE: 11x17  
SHEET: 2 of 2  
REV/NP: 07/11

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