

Product Data Sheet

MRP-PP30-1 Grade

Polypropylene, Homopolymer Plastic Resin

Product Description

MRP-PP30-1 is a high flow polypropylene homopolymer resin designed for injection molding applications requiring good balance stiffness, excellent part finish, process ability, and good mold release.

Compliant to the Following Regulatory Standards:

FDA-21 CFR 177.1520(c)

EU 10/2011, EC 2002/72

RoHS

Proposition 65

CONEG/Heavy Metal


Typical Properties	Method	Typical Value	Unit
Physical			
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	ASTM D1238	30	g/10 min
Mechanical			
Tensile Strength (50mm/min) (Yield)	ASTM D 638	33.1	MPa
Tensile Elongation (50mm/min) (Yield)	ASTM D 638	10	%
Flexural Modulus – 1% Secant (1.3 mm/min)	ASTM D790A	1380	MPa
Hardness, Rockwell R	ASTM D785	104	-
Impact			
Notched Izod impact (23 °C, Method A)	ASTM D 256A	37	J/m
Thermal			
Heat Deflection (Softening Point) Unannealed DTLU @ 66psi	ASTM D 648	91	°C
Processing Range	-----	400 – 500	°F

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 warrants this grade to meet typical data values and physical, chemical, and processing properties.

	Raw Material Product Data Sheet	
	Product Name: MRPBK01	Revision #: A
	Revision Date	August 14, 2019
	Effective Date	October 14, 2019

Product Name:

MRPBK01

Product Description:

FDA Compliant black colorant intended to be used with injection-molded plastic resin

Product Data:

Additives None

<u>Typical Properties</u>	<u>Typical Value</u>
Delta E Tolerance	Less than 2.00
Visual Evaluation	Visual match to approved color standard

<u>FDA Compliance/Status</u>		
FDA, Title 21 CFR Food & Drug Contact	<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Not

This colorant formulation has been manufactured using FDA approved ingredients and, when used appropriately (with an FDA approved resin), will meet FDA contact applications regulated under the provisions of the Food, Drug, and Cosmetic Act (and subsequent amendments as outlined in Title 21 of the Code of Federal Regulation.

<u>Additional Compliance/Status (and amendments as of the date of this document)</u>		
Proposition 65, Safe Drinking Water and Toxic Enforcement Act	<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Not
CONEG, Model Toxics in Packaging Legislation	<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Not
EU 2015/863, as regards the list of restricted substances, RoHS	<input checked="" type="checkbox"/> Compliant	<input type="checkbox"/> Not

For further regulatory information, please contact Mold Rite Plastic's customer service or sales department.

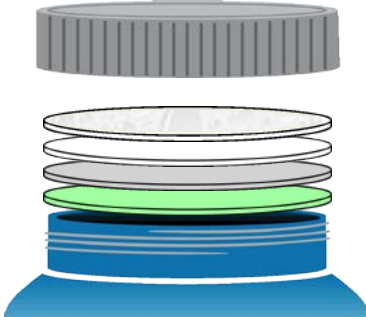
This product data sheet addresses all colorants that meet the above requirements & specifications. Data was obtained from supplier product data sheets (where applicable). This data is intended to be used as a guide only. It is ultimately the customer's responsibility to determine the suitability of the material for their specific application, and to be responsible for assuring compliance with all applicable laws and regulations.

HS 035 HEAT SEAL/20F

- Designed as a one-piece, polystyrene backed, induction heat seal with an ethylene vinyl acetate based sealant layer that gives a tamper evident bond to Polyethylene (PE), Polypropylene (PP), Polyester (PET), Polystyrene (PS), Vinyl (PVC) and glass containers.
- Available with standard or custom print.

Typical Product Attributes

Construction

Polystyrene Foam Paper Aluminum Foil Heat Seal		SI (µm)	US (Mils)
		508,0	20.0
		71,1	2.8
		8,9	0.35
		63,5	2.25
Minimum Width Width Tolerance		25,4 mm ± 1.6 mm	1.0 inch ± 1/16

Properties

Water Vapor Transmission (WVTR)	Essentially Zero
Gas (O ₂) (GTR)	Essentially Zero

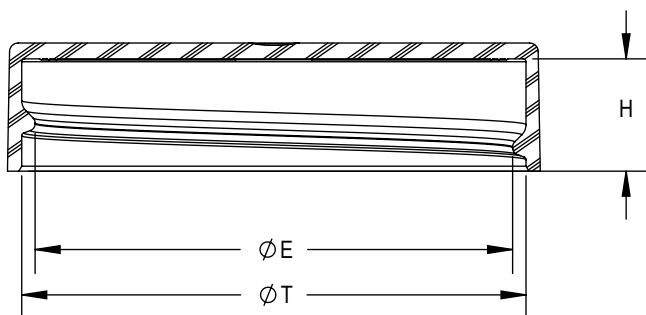
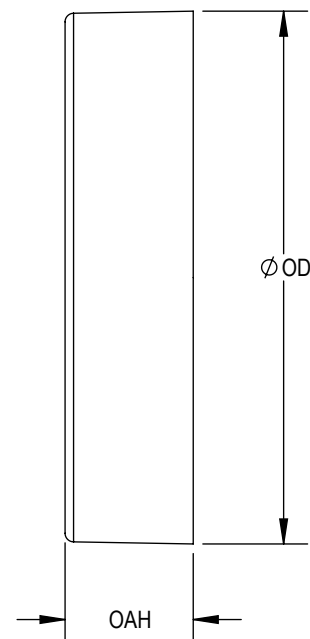
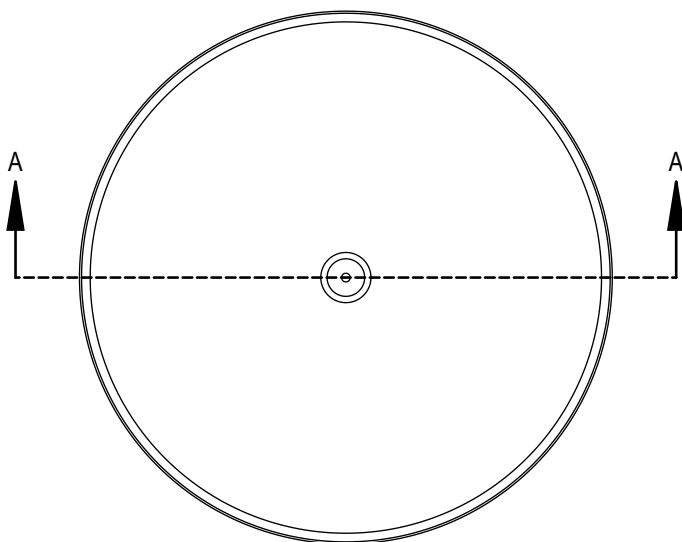
Regulatory Compliance

FDA Compliance	21 CFR 177.1640 Polystyrene and rubber-modified polystyrene. 21 CFR 177.1350 Ethylene-vinyl acetate copolymers. 21 CFR 177.1210 Closures with sealing gaskets for food containers 21 CFR 176.180 Components of paper and paperboard in contact with dry foods. 21 CFR 176.170 Components of paper and paperboard in contact with aqueous and fatty foods.
Drug Master File (DMF)	2518
Other Compliances	USFDA Food Allergen Guidelines; California Proposition 65 Labeling Requirements; Limitations of Heavy Metals in Packaging per CONEG & EU 94/62/EC, Article 11

Original Date: 2016-03-25
Revised Date: N/A
Revision Number: 0
Created by PEY

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SECTION A-A

THREAD DETAIL:
6 THREADS PER INCH, 0.167" PITCH

REFERENCE	TOLERANCE	UNITS	DIMENSION
E	±.010[0.25]	in [mm]	1.656 [42.06]
T	±.010[0.25]	in [mm]	1.752 [44.50]
H	±.010[0.25]	in [mm]	0.390[9.91]
OD	±.012[0.30]	in [mm]	1.850[46.99]
OAH	±.010[0.25]	in [mm]	0.445 [11.30]
PART WEIGHT	± 0.50	g	3.69

STATIC TORQUE RECOMMENDATION
17-27 in-lbs
THIS REQUIREMENT MAY VARY DEPENDING
UPON BOTTLE MATERIAL, NECK FINISH, AND
CAPPING EQUIPMENT

DRAWING TYPE : **CUSTOMER**

REPLACES DRAWINGS:
C-1010

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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DISTRIBUTION
CODE

D

DRAWING NAME
45-400 CT CLOSURE
SS (Smooth Side - Smooth Top)

DRAWING NUMBER
CQA - 10300

MATERIAL
POLYPROPYLENE

MODEL NUMBER:
PM 10297 45-400 CT

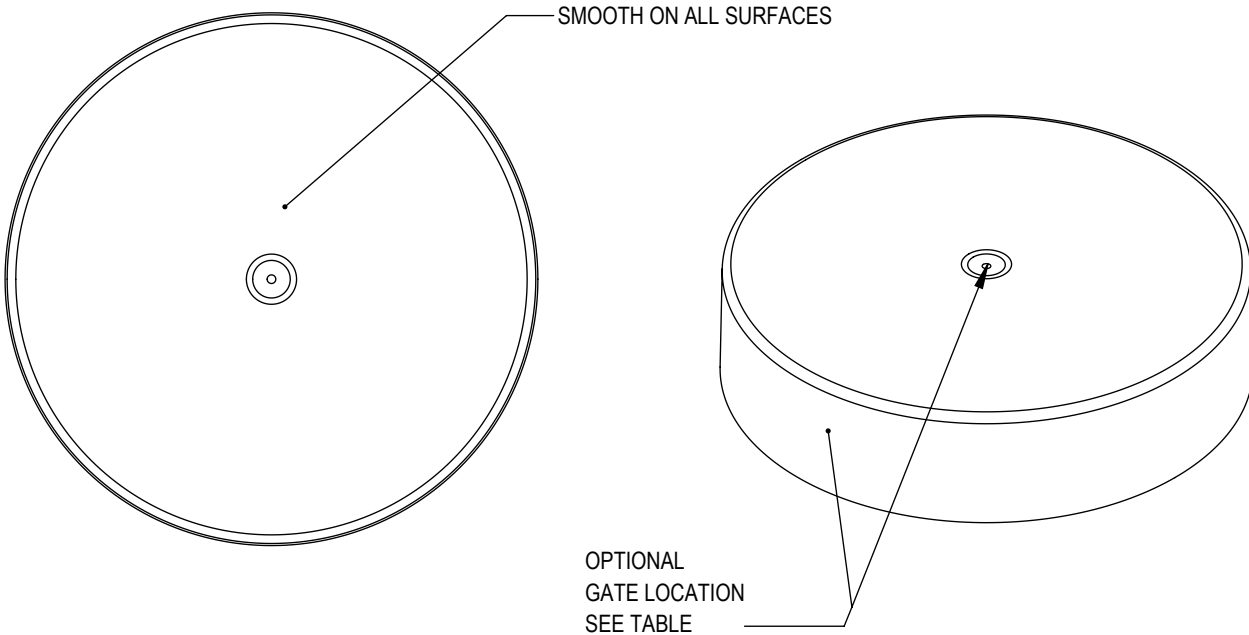
SCALE	SHEET SIZE	SHEET	REV.NP
1:1	8.5in*11in	1 of 3	00.AB

DRAWN BY.	JDM	6/3/2016
ENG APPR.	BDG	8/17/2017
QA APPR.	REL	09/05/2017

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.

MOLD-RITE, WEATHERCHEM AND STULL TECHNOLOGIES
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SPECIFICATIONS AND REQUIREMENTS.

REVISIONS						
DATE	REV.	N/P	PRODUCT DRAWING REQUEST	DESCRIPTION	ENG	DRW
6/3/2016	00	AA	PDR 16-025	UPDATE DRAWING FORMAT, REFER TO C-1010 FOR REVISION HISTORY	JDM	JDM
6/14/2017	00	AB	PDR 17-035	UPDATED OD TOLERANCE, T DIMENSION AND PART WEIGHT BASED ON HISTORICAL DATA, ADDED GATE LOCATION TABLE	BDG	BDG



MOLD NUMBER	GATE LOCATION
45001	SIDE
45003	SIDE
45005	SIDE
45007	SIDE
45011	TOP CENTER

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.

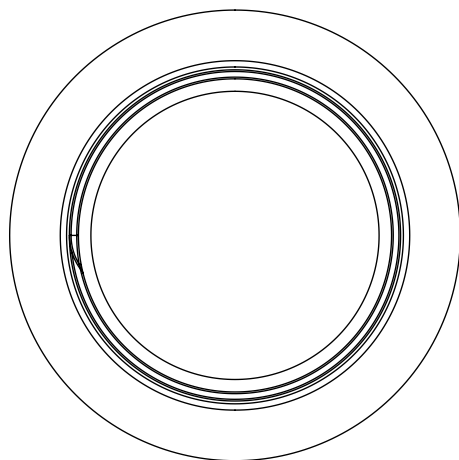
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DRAWING TYPE : CUSTOMER

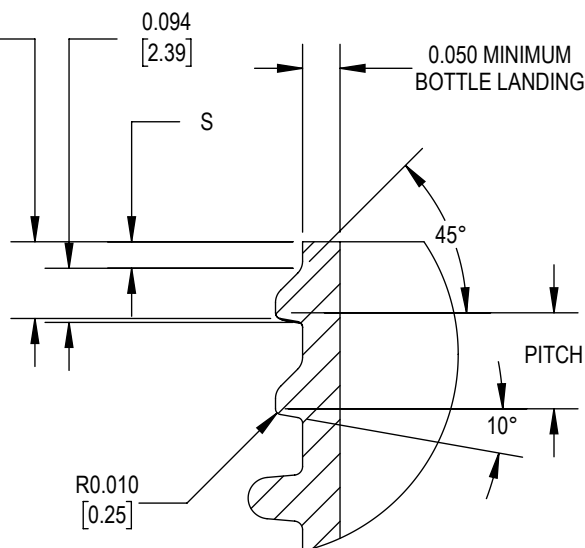
REFERENCES: 45001, 45003, 45005, 45007, 45011	DIMENSIONS ENCLOSED IN () INDICATE REFERENCE DIMENSIONS AND NO TOLERANCE LIMITS ARE ESTABLISHED		
TOLERANCES UNLESS OTHERWISE SPECIFIED			
DIMENSION (inches)	TOLERANCE	DIMENSION (mm)	TOLERANCE
0-0.787	±0.006	0-20	±0.152
0.788-1.181	±0.008	21-30	±0.203
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5.097-7.874	±0.024	151-200	±0.610
7.875-9.843	±0.032	201-250	±0.813
ANGULAR TOLERANCE ± 2°			
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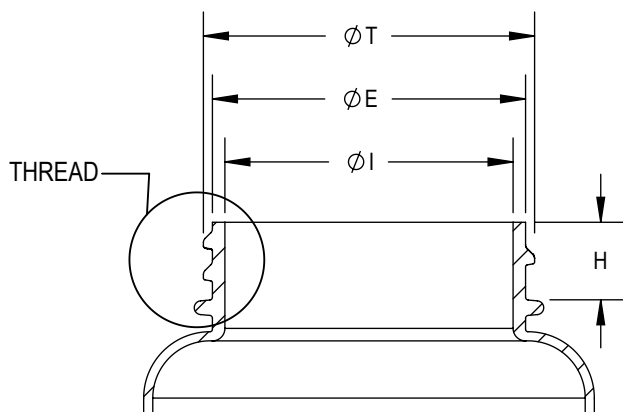
THIRD ANGLE PROJECTION	DISTRIBUTION CODE D	DRAWING NAME 45-400 CT CLOSURE SS (Smooth Side - Smooth Top)
		DRAWING NUMBER CQA - 10300
		MATERIAL POLYPROPYLENE
		MODEL NUMBER: PM 10297 45-400 CT
DRAWN BY. JDM	6/3/2016	SCALE 1:1
ENG APPR. BDG	8/17/2017	SHEET SIZE 8.5 X 11
QA APPR. REL	09/05/2017	SHEET 2 of 3
		REV.NP 00.AB



0.133
[3.38]
S' - CRITICAL FOR ORIENTATION
0.001" = 2 IN ROTATION



DETAIL THREAD
SCALE 3 : 1



SECTION C-C
SCALE 1 : 1

REFERENCE	TOLERANCE	UNITS	DIMENSION
E	±0.012 [0.30]	in [mm]	1.631 [41.43]
T	± 0.017 [0.43]	in [mm]	1.725 [43.82]
I	MINIMUM	in [mm]	1.525 [38.74]
S	± 0.015 [0.38]	in [mm]	0.046 [1.17]
H	± 0.015 [0.38]	in [mm]	0.415 [10.54]
TPI			6
PITCH		in [mm]	0.167 [4.24]

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

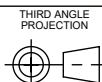
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ANGULAR TOLERANCE ± 2°

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SOLIDWORKS

DISTRIBUTION CODE

D

DRAWING NAME

45-400 CT CLOSURE
RECOMMENDED NECK FINISH

DRAWING NUMBER

CQA - 10300

MATERIAL

DRAWN BY.

JDM

6/3/2016

ENG APPR.

BDG

8/17/2017

QA APPR.

REL

09/05/2017

MODEL NUMBER:

SCALE

SHEET SIZE

SHEET

REV/N/P

1:2

8.5 X 11

3 of 3

00.AB

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