

### **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	ōС
Processing Range		400 – 500	ºF

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

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 misapplication 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 to customer option for replacement (not to exceed the purchase price) with the addition of transportation charges, on material for which damage is claimed.



FDA, Title 21 CFR Food & Drug Contact

Raw Material Product Data Sheet			
Product Name: MRPWH01	Revision #: A		
Revision Date	03/07/2019		
Effective Date	07/01/2019		

☐ Not

Product Name:	
MRPWH01	
Product Description:	
FDA Compliant White colorant, intended to be used	with injection-molded plastic resin
Product Data:	
Additives	None
Typical Properties	<u>Typical Value</u>
Delta E Tolerance	Less than 2.00
Visual Evaluation	Visual match to approved color standard

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.

**FDA Compliance/Status** 

Additional Compliance/Status (and amendments as of the date of this document)

Proposition 65, Safe Drinking Water and Toxic Enforcement Act	□ Not
CONEG, Model Toxics in Packaging Legislation	□ Not
EU 2015/863, as regards the list of restricted substances, RoHS	□ 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.



# TRI) SEAL PRODUCT DATA SHEET



## PRESSURE SEAL/20

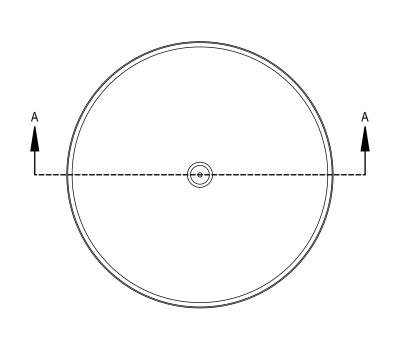
- PRESSURE SEAL/20 is an innerseal with a construction of pressure sensitive adhesive coated on polystyrene foam.
- Recommended for use with dry products.
- Not tamper evident.
- Available with custom or standard print.

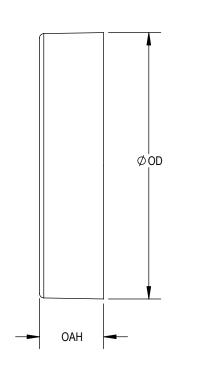
### **Typical Product Attributes**

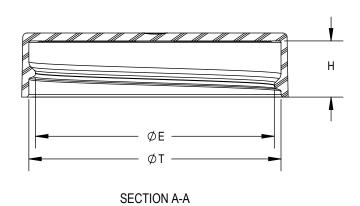
Construction						
		SI (μm)	US (Mils)			
Polystyrene Foam Pressure Sensitive Adhesive		508,0 63,5	20.0 2.5			
Minimum Width Width Tolerance		25,4 mm ± 1,6 mm	1.0 inch ± 1/16			
Properties	Properties					
Foam Density	7 - 15 Lb./Ft³					
Water Vapor Transmission (WVTR)	Not	Tested				
Gas (O <sub>2</sub> ) (GTR)	Not	Tested				
Regulatory Compliance						
FDA Compliance	21 CFR 177.1640 Polystyrene and rubber-mod	dified polystyrene.				
	21 CFR 177.1210 Closures with sealing gaskets for food containers					
	21 CFR 175.125 Pressure-sensitive adhesives.					
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: 2016-07-18 Revised Date: N/A Revision Number: 0 Created by PEY

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#### THREAD DETAIL: 6 THREADS PER INCH, 0.167" PITCH REFERENCE **TOLERANCE** UNITS **DIMENSION** $\pm .010[0.25]$ 1.656 [42.06] Ε in [mm] Τ $\pm .010[0.25]$ 1.752 [44.50] in [mm] Н $\pm .010[0.25]$ in [mm] 0.390[9.91] OD $\pm .012[0.30]$ in [mm] 1.850[46.99] OAH $\pm .010[0.25]$ 0.445 [11.30] in [mm] PART WEIGHT 3.69 $\pm 0.50$ g

# STATIC TORQUE RECOMMENDATION

17-27 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 ASSURANCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

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## DRAWING TYPE: CUSTOMER

REPLACES DRAWINGS: DIMENSIONS ENCLOSED IN ( ) INDICATE REFERENCE DIMENSIONS AND NO TOLERANCE LIMITS ARE ESTABLISHED C-1010 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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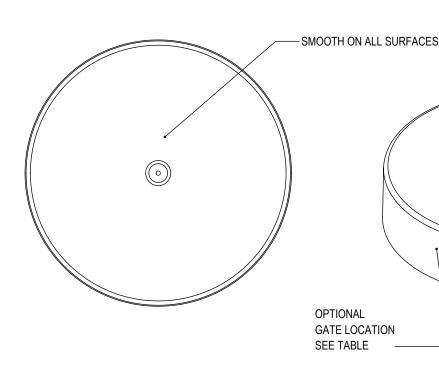
DISTRIBUTION DRAWING NAME CODE

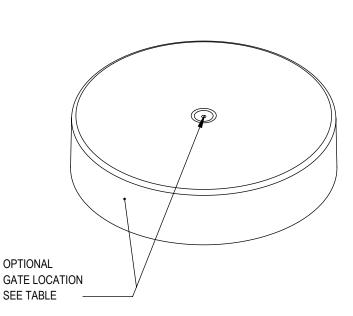
45-400 CT CLOSURE SS (Smooth Side - Smooth Top)

DRAWING NUMBER CQA - 10300

MATERIAL POLYPROPYLENE 6/3/2016 DRAWN BY. MODEL NUMBER 8/17/2017 PM 10297 45-400 CT ENG APPR. SHEET SIZE SHFF REV NE SCALE REL 09/05/2017 QA APPR. 1:1 00.AB 8.5in\*11in 1 of 3

	REVISIONS						
	DATE	REV.	N/P	PRODUCT DRAWING REQUEST	NG DESCRIPTION		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 SIDE 45003 45005 SIDE 45007 SIDE **TOP CENTER** 45011

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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						
T	OLERANCES UNLESS	OTHERWISE SPECIF	FIED			
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	7.875-9.843 ±0.032 201-250 ±0.813					
ANGULAR TOLERANCE ± 2°						
PROPRIETARY AND CONFIDENTIAL						

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

8 .5 X 11

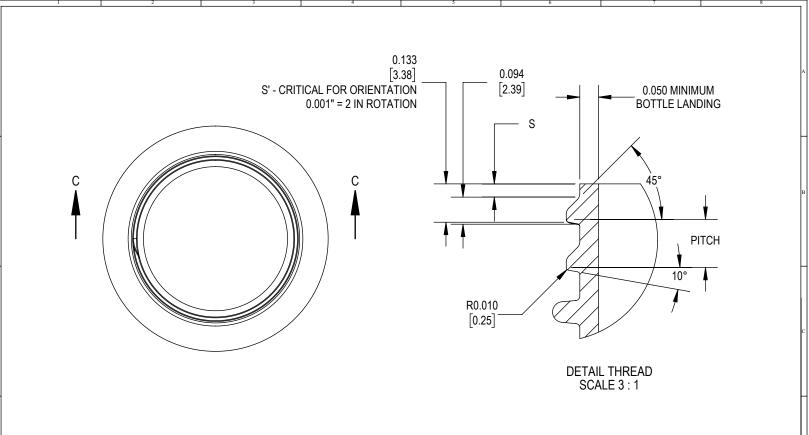
REV.NP

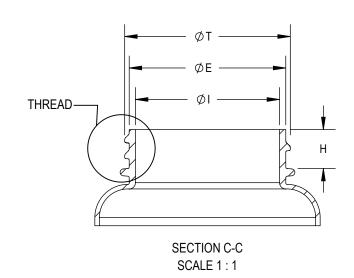
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2 of 3

DRAWING NUMBER CQA - 10300

MATERIAL **POLYPROPYLENE** DRAWN BY. JDM 6/3/2016 MODEL NUMBER 8/17/2017 PM 10297 45-400 CT ENG APPR. SHEET SIZE SHEET SCALE QA APPR. REL 09/05/2017





REFERENCE	TOLERANCE	UNITS	DIMENSION
Е	±0.012 [0.30]	in [mm]	1.631 [41.43]
Т	± 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]
Н	± 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.

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

DRAWING TYPE:

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SPECIFICATIONS AND REQUIREMENTS.	

TOLERANCES UNLESS OTHERWISE SPECIFIED				
DIMENSION (inches) TOLERANCE		DIMENSION (mm)	TOLERANCE	1
0-0.787	±0.006	0-20	±0.152	1
0.788-1.181	±0.008	21-30	±0.203	1
1.182-2.756	±0.012	31-70	±0.305	H
2.757-3.937	±0.016	71-100	±0.406	1
3.938-5.096	±0.020	101-150	±0.508	1-
5.097-7.874	±0.024	151-200	±0.610	1
7.875-9.843	±0.032	201-250	±0.813	
ANGULAR TOLERANCE + 2°				

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SOLIDWORKS			
DDVWN BA	JE	M	6/3/2016

45-400 CT CLOSURE RECOMMENDED NECK FINISH

DRAWING NUMBER CQA - 10300 MATERIAL

ENG APPR.	BDG	8/17/2017	MODEL NUMBER:			
QA APPR.	REL	09/05/2017	SCALE	SHEET SIZE	SHEET	REV.N/P
			1:2	8 .5 X 11	3 of 3	00.AB