

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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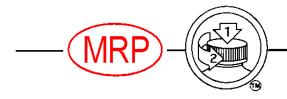
550 Technology Drive

Revision Date: Monday, March 23, 2009

and exposure to this product, please see material safety data sheet code number C4001 published by Braskem.

Pittsburgh, PA 15219 1-800-223-8871

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1 PLANT STREET, P.O. BOX 160 PLATTSBURGH, NY 12901 (518) 561-1812 http://moldriteplastics.com

Product Data Sheet

CP0001 Grade

Polypropylene, Impact Copolymer

Product Description

CP0001 is a high flow, high impact polypropylene copolymer grade resin designed for molding applications requiring good balance stiffness, impact resistance and process ability. This grade specification designated by Mold-Rite Plastics covers all copolymer resins that meet the typical value data listed below.

Regulatory Compliance

FDA-21 CFR 177.1520(c) 3.1 for Food & Drug Contact RoHS Compliant CONEG/Heavy Metal Compliant Proposition 65 Compliant EU Directive 2002/72/EC Compliant

| Typical Properties | Method | Typical Value | Unit |
|---|-------------|---|--------------------|
| Diserved | | | |
| Physical Density – Specific Gravity | ASTM D 792 | .900905 | on or |
| Density – Specific Gravity | ASTM D 192 | .900903 | sp gr. 23/23° C |
| Melt Flow Rate | ASTM D 1238 | 35.0 | g/10 min |
| Mechanical | | | |
| Tensil Strength @ Yield | ASTM D 638 | | |
| (2 in/min) | | 3,100 - 4,000 | PSI |
| (50 mm/min) | | 21.4 - 27 | MPa |
| Flexural Modulus | ASTM D 790 | | |
| (0.05 in/min, 1% Secant, Procedure A) | | 160,000 - 210,000 | PSI |
| (1 mm/min, 1% Secant, Procedure A) | | 1,103 – 1,450 | MPa |
| Towns of | | | |
| Impact Notched Izod impact | ASTM D 256 | | |
| (23 °C, Method A) | | 1.4 - 2.4 | Ft-lb/in |
| (, , | | 75 – 128 | J/m |
| Thomas | | | |
| Thermal Heat Deflection (Seftening Boint) Unempeded | ASTM D 648 | | <u> </u> |
| Heat Deflection (Softening Point) Unannealed DTLU @ 66psi | ASTM D 048 | 212 – 225 | °F |
| DILO @ oohsi | | $\begin{vmatrix} 212 - 223 \\ 88 - 107 \end{vmatrix}$ | °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 reserves that right to include any other resin grade that meets that above data values and regulatory requirements.

This product data sheet covers multiple resin formulations and include any other resin grade that meets the above typical data values and regulatory requirements. All listed grades have similar physical, chemical and processing properties. Listed known grades; 44FY01; SG802N; AP5135H; 4820WZ; 6535A; 2535A

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.

Revision Date: 07/15/2014



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



HS035 HEAT SEAL//25 White Lined Pulp

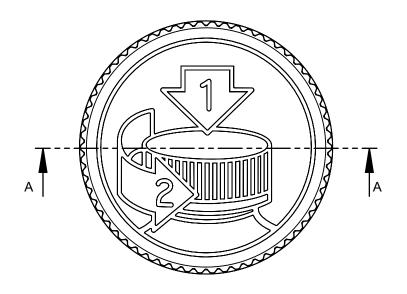
- Designed as a two-piece, pulp backed, induction heat seal and liner with an ethylene vinyl acetate based sealant layer that gives a tamper evident bond to Polyethylene (PE), Polypropylene (PP). Polyester (PET), Polystyrene (PS), Vinyl (PVC) and glass containers.
- Available with standard or custom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

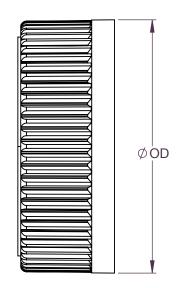
Typical Product Attributes

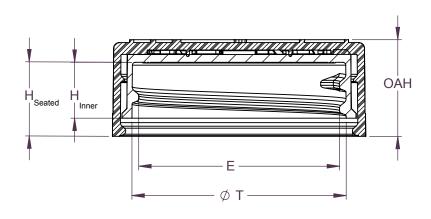
| Construction | | | | | | |
|-------------------------------------|--|-----------------------|-------------------------|--|--|--|
| | | SI (µm) | US (Mils) | | | |
| Pulp Wax | | 635,0 25,4 | 25.0 1.0 | | | |
| Paper Aluminum Foil Heat Seal | 1 | 71,1 8,9 63,5 | 2.8 0.35 2.25 | | | |
| Minimum Width Width Tolerance | | 25,4 mm ± 1,6 mm | 1.0 inch ± 1/16 | | | |
| Properties | | | | | | |
| Water Vapor Transmission (WVTR) | Essenti | ally Zero | | | | |
| Gas (O ₂) (GTR) | Essenti | ally Zero | | | | |
| Regulatory Compliance | | | | | | |
| FDA Compliance | 21 CFR 178.3710 Petroleum wax. | | | | | |
| | 21 CFR 177.1350 Ethylene-vinyl acetate copoly | mers. | | | | |
| | 21 CFR 177.1210 Closures with sealing gaskets | s 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 Pr of Heavy Metals in Packaging per CONEG & EU | | quirements; Limitations | | | |

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

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SECTION A-A SCALE 3 : 2

.167 PITCH - 6 THREADS PER INCH 380° FULL DEPTH THREAD

| REFERENCE | TOLERANCE | DIMENSION | UNITS |
|-------------|---------------|---------------|---------|
| E | ±0.010 [0.25] | 1.396 [35.46] | in [mm] |
| Т | ±0.010 [0.25] | 1.488 [37.80] | in [mm] |
| H (Seated) | REFERENCE | 0.521 [13.23] | in [mm] |
| H (Inner) | ±0.008 [0.20] | 0.388 [9.86] | in [mm] |
| OD | ±0.013 [0.33] | 1.760 [44.70] | in [mm] |
| OAH | ±0.011 [0.28] | 0.671 [17.04] | in [mm] |
| PART WEIGHT | ± 0.7 | 7.1 | g |

STATIC TORQUE RECOMMENDATION

17-26 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

DIMENSIONS ENCLOSED IN () INDICATE REFERENCE DIMENSIONS AND NO TOLERANCE LIMITS ARE ESTABLISHED REPLACES DRAWINGS: C-8019

| 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 | 1.182-2.756 ±0.012 | | ±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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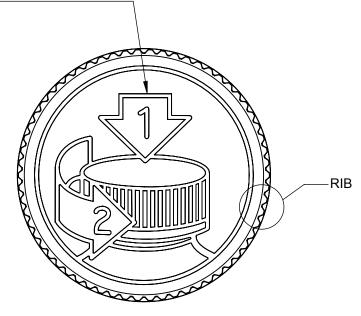
38-400 CRC PDT ASSM

PICTO DRAWING NUMBER

CQA - 10023 MATERIAL 4/29/2016 DRAWN BY. BDG POLYPROPYLENE ENG APPR. BDG 2/1/2017 `PM-10161 38-400 CRC ASSM REV NP SHEET SIZE SHEET QA APPR. ACP 02/01/2017 04.AD 11in*8.5in 1:1 1 of 3

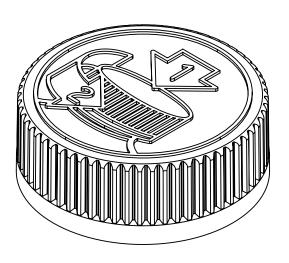
| DATE | REV | N/P | DESCRIPTION | ENG | DRWN |
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| 01/30/17 | 04 | AD | DRAWING FORMAT UPDATED. ADDED H(SEATED) AS REFERENCE DIMENSION | BDG | BDG |

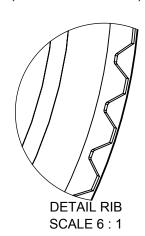
INSTRUCTIONS EMBOSSES





ALTERNATE PICTO INSTUCTIONS (SIDE GATED MOLD)





(62) EQUISPACED RIBS

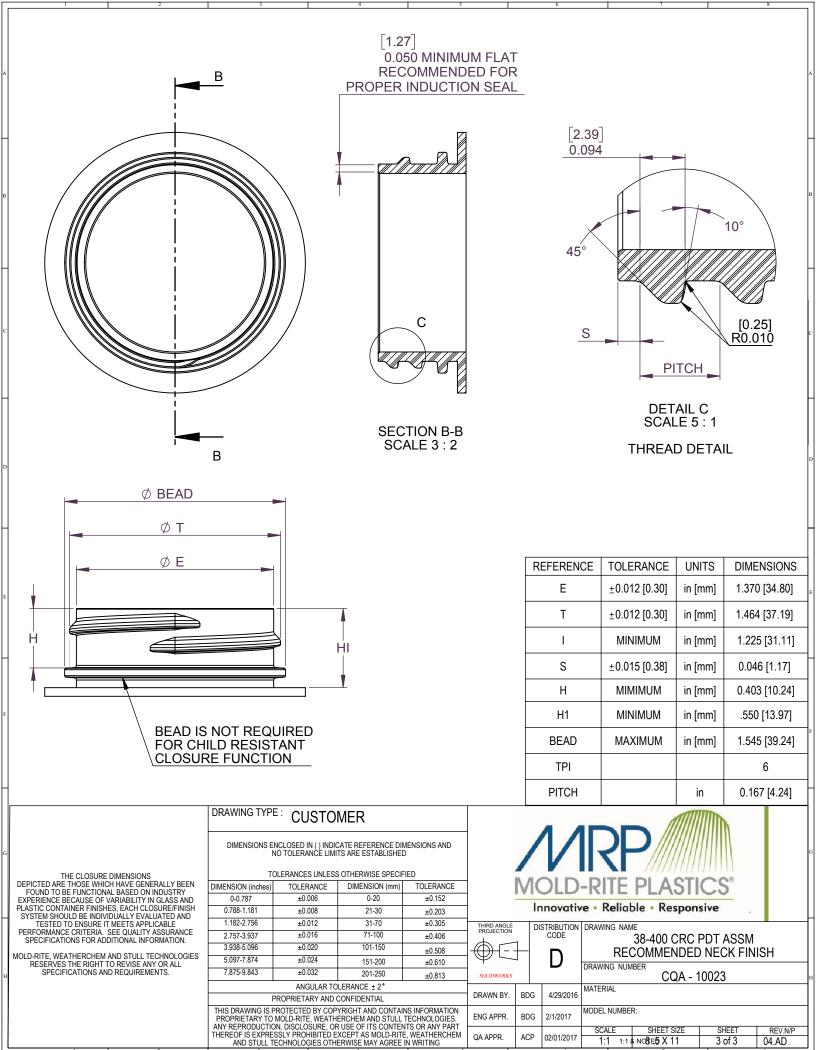
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| REFERENCES: | | INDICATE R DIMENSIONS AND | NCLOSED IN () EFFERENCE) NO TOLERANCE ESTABLISHED | | |
| TO | OLERANCES UNLESS | OTHERWISE SPECIF | IED | | |
| DIMENSION (inches) | TOLERANCE | DIMENSION (mm) | TOLERANCE | | |
| 0-0.787 | ±0.006 | 0-20 | ±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 | 2.757-3.937 ±0.016 | | ±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 TO | LERANCE ± 2° | | | |
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| | THIRD ANGLE PROJECTION CODE | | | DRAWIN | ng nan | 38-400 CRC PICT | | | |
| | SOLIDWORKS | ; | | ט | DRAWIN | IG NUM | IBER CQA - 1 | 0023 | |
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| ON S. | ENG APPR. | BC |)G | 2/1/2017 | MODEL | | PM-10161 38-40 | 0 CRC ASSM | |
| RT IEM | QA APPR. | A | СР | 02/01/2017 | SCA 1:1 | | SHEET SIZE 8 .5 X 11 | SHEET 2 of 3 | REV.NP 04.AD |
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OA APPR

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02/01/2017

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3 of 3

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