

# SHARED PURPOSE INSPIRES UNEXPECTED IDEAS.

MRP Solutions is a leading provider of high-quality, injection molded plastic closures, jars and packaging components used every day by millions of consumers around the globe. But we offer more than just plastic caps and lids – we deliver fast, flexible and reliable packaging solutions. MRP Solutions combines extensive packaging expertise with a consultative approach to reliably uncover customer needs. By understanding your business goals, we can tailor smarter, safer, and more flexible packaging solutions that reduce cost and increase speed to market, helping your businesses capitalize on opportunity.

We are passionate about partnering with distributors and manufacturers who understand that plastic caps and lids are a small but important part of how people experience their brands. Together, we deliver packaging with purpose.

MRP Solutions has the most complete collection of child resistant closures on the market, as well as a broad array of jars, continuous thread closures, dispensing closures and specialty caps. And, our in-house design and tooling capabilities allow us to quickly customize solutions. Since 1976, MRP Solutions has served a diverse range of markets including:

- Nutraceutical
- Pharmaceutical
- Food and Beverage
- Personal Care
- Homecare
- Automotive

What started with six full-time employees and five used injection-molding machines has grown into a full-scale, environmentally responsible manufacturing operation with molding, lining and decorating capabilities. Now, with manufacturing locations in Plattsburgh, NY, Twinsburg, OH and Somerset, NJ as well as a Solutions Center in Lake Forest, NJ, MRP has a broad manufacturing footprint to develop and deliver a wide range of products and fulfill our mission to lead the market as a trusted partner delivering responsive packaging solutions. MRP Solutions now has a broadened footprint that further enhances our ability to deliver.

### Sustainability is our Responsibility

MRP Solutions is an environmentally responsible manufacturer of packaging. We take pride in our on-going initiative to delight our customers by offering more sustainable products which reduce the amount of plastics used, provide recyclable options and promote re-use where ever possible. We have continuously invested in our manufacturing facilities to identify technology which conserves energy, uses renewable energy, and minimizes environmental impacts to our community and neighbors while we find a way to incorporate and re-use all material and recycle all scrap. In this day and age, it is important we take our efforts one step further and conduct the research necessary to educate our employees, customers and consumers on the advantages of plastics as a packaging choice, the importance of proper recycling and identification of viable options.

#### **Contents**

### **Manufacturing Locations**

- Plattsburgh
- Somerset
- Twinsburg

#### **Materials**

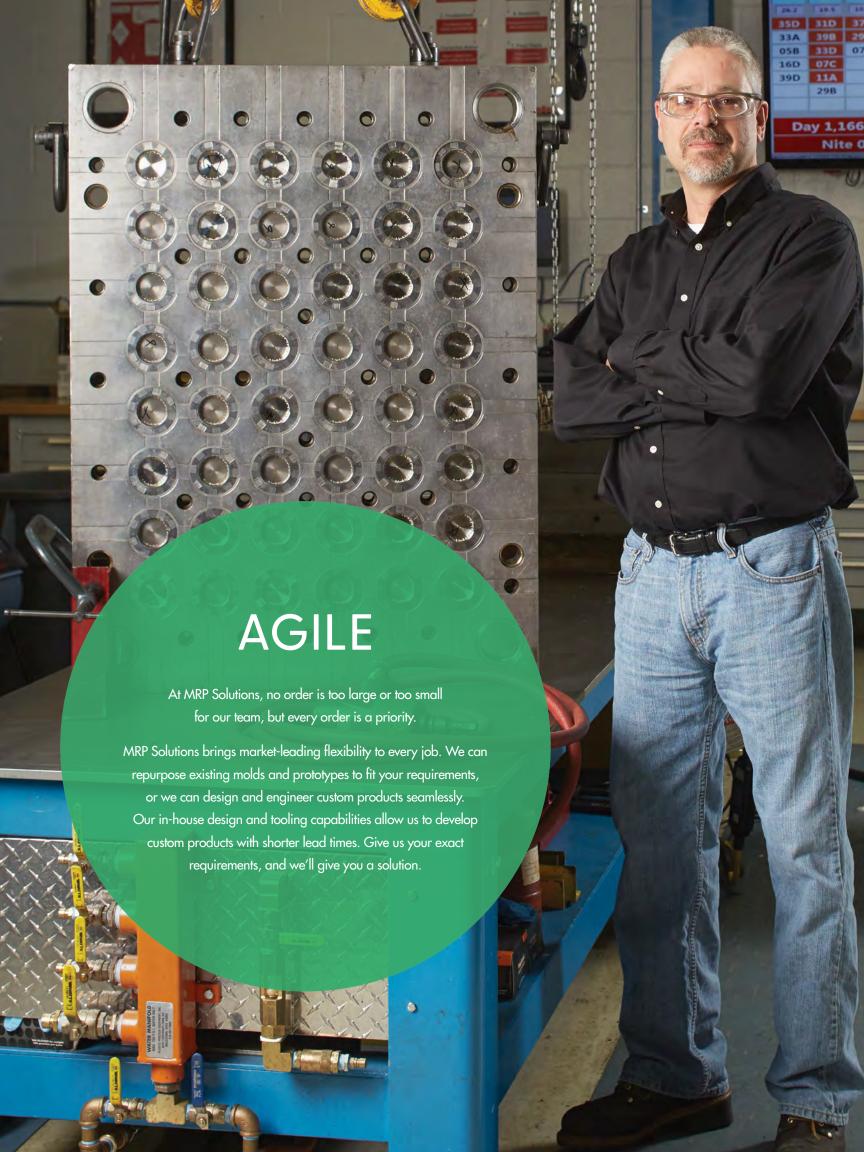
CPP - CoPoly/Polypropylene

LDPE - Low-density Polyethylene

MDPE - Medium-density Polyethylene

PP - Polypropylene

PS - Polystyrene



### **CONTINUOUS THREAD**

With a variety of finishes from smooth or matte tops to ribbed sides, the continuous thread closure options and applications are endless. Threaded to fit precisely to your container and seal tightly, these versatile closures are easily customizable with embossing, debossing and decorating options.

Ideal markets: Pharmaceuticals, nutraceuticals, personal care, homecare, food, craft and hobby

Stocking: White closures in stock and ready to ship, black available on select options



| MFG.<br>ITEM ID | SIZE<br>(MM) | NECK FINISH | MATERIAL | MFG.<br>LOCATION | PIECES<br>PER CARTON | CARTON<br>WEIGHT (LBS) | PIECES<br>PER PALLET | CARTONS<br>PER PALLET |
|-----------------|--------------|-------------|----------|------------------|----------------------|------------------------|----------------------|-----------------------|
| SMOOTH SID      | E, SMOOTH TO | OP          |          |                  |                      |                        |                      |                       |
| SL24            | 24           | 410         | PP       | •                | 4,000                | 21                     | 140,000              | 35                    |
| SS028           | 28           | 400         | PP       | •                | 5,000                | 23                     | 175,000              | 35                    |
| SS033           | 33           | 400         | PP       | •                | 4,000                | 22                     | 140,000              | 35                    |
| SS038           | 38           | 400         | PP       | •                | 2,900                | 21.50                  | 101,500              | 35                    |
| SS043           | 43           | 400         | PP       | •                | 2,200                | 18.50                  | <i>7</i> 7,000       | 35                    |
| SS045           | 45           | 400         | PP       | •                | 2,000                | 19                     | 70,000               | 35                    |
| SS048           | 48           | 400         | PP       | •                | 1,700                | 18                     | 59,500               | 35                    |
| SS053           | 53           | 400         | PP       | •                | 1,300                | 18                     | 45,500               | 35                    |
| SS058           | 58           | 400         | PP       | •                | 1,100                | 1 <i>7</i>             | 38,500               | 35                    |
| SS063           | 63           | 400         | PP       | •                | 900                  | 17                     | 31,500               | 35                    |
| SS070           | 70           | 400         | PP       | •                | <i>7</i> 60          | 18                     | 26,600               | 35                    |
| SS083           | 83           | 400         | PP       | •                | 500                  | 15                     | 17,500               | 35                    |
| SS089           | 89           | 400         | PP       | •                | 580                  | 20.50                  | 16,240               | 28                    |
| SX089           | 89           | 400         | PP       | 6                | 620                  | 19.62                  | 16,740               | 28                    |
| SS100           | 100          | 400         | PP       | •                | 256                  | 14                     | 8,960                | 35                    |
| SS110           | 110          | 400         | PP       | •                | 216                  | 13                     | 7,560                | 35                    |
| SS120           | 120          | 400         | PP       | •                | 240                  | 15.70                  | 6,720                | 28                    |
|                 |              |             |          |                  |                      |                        |                      |                       |
|                 | MATTE TOP, S |             |          |                  |                      |                        |                      |                       |
| RM048           | 48           | 400         | PP       | •                | 1,700                | 18                     | 59,500               | 35                    |
| RM053           | 53           | 400         | PP       | •                | 1,300                | 18                     | 45,500               | 35                    |
| RM058           | 58           | 400         | PP       | •                | 1,100                | 17                     | 38,500               | 35                    |
| RM063           | 63           | 400         | PP       | 0                | 900                  | 17                     | 31,500               | 35                    |
| RM070           | 70           | 400         | PP       | 0                | <i>7</i> 60          | 18                     | 26,600               | 35                    |
| RM083           | 83           | 400         | PP       | 0                | 500                  | 15                     | 1 <i>7</i> ,500      | 35                    |
| RM089           | 89           | 400         | PP       | 0                | 580                  | 20.50                  | 16,240               | 28                    |
| RXO89           | 89           | 400         | PP       | 6                | 580                  | 1 <i>7</i> .60         | 15,660               | 28                    |
| RM100           | 100          | 400         | PP       | 0                | 256                  | 14                     | 8,960                | 35                    |
| RM110           | 110          | 400         | PP       | 0                | 216                  | 13                     | 7,560                | 35                    |
| RM120           | 120          | 400         | PP       | •                | 228                  | 14.80                  | 6,384                | 28                    |

## CONTINUOUS THREAD (continued)



| Ribbed | Side. | Matte | Tor |
|--------|-------|-------|-----|
|        |       |       |     |

| MFG.<br>ITEM ID | SIZE<br>(MM) | NECK FINISH | MATERIAL | MFG.<br>LOCATION | PIECES<br>PER CARTON | Carton<br>Weight (LBS) | PIECES<br>PER PALLET | CARTONS<br>PER PALLET |
|-----------------|--------------|-------------|----------|------------------|----------------------|------------------------|----------------------|-----------------------|
| RIBBED SIDE, A  | MATTE TOP    |             |          |                  |                      |                        |                      |                       |
| RXO20           | 20           | 400         | PP       | •                | 10,225               | 26                     | 357,875              | 35                    |
| RXO22           | 22           | 400         | PP       | •                | 8,500                | 23                     | 297,500              | 35                    |
| RXO24           | 24           | 400         | PP       | •                | 6,500                | 24.50                  | 227,500              | 35                    |
| RXO33           | 33           | 400         | PP       | •                | 4,000                | 22                     | 140,000              | 35                    |
| RXO38           | 38           | 400         | PP       | •                | 2,900                | 21.50                  | 101,500              | 35                    |
| RXO43           | 43           | 400         | PP       | •                | 2,200                | 18.50                  | 77,000               | 35                    |
| RXO45           | 45           | 400         | PP       | •                | 2,000                | 19                     | 70,000               | 35                    |
| RIBBED SIDE, S  |              |             |          |                  |                      |                        |                      |                       |
| RS028           | 28           | 400         | PP       | 0                | 5,000                | 23                     | 175,000              | 35                    |
| RS033           | 33           | 400         | PP       | 0                | 4,000                | 22                     | 140,000              | 35                    |
| RS038           | 38           | 400         | PP       | 0                | 2,900                | 21.50                  | 101,500              | 35                    |
| RSO43           | 43           | 400         | PP       | •                | 2,200                | 18.50                  | <i>77</i> ,000       | 35                    |
| RS045           | 45           | 400         | PP       | 0                | 2,000                | 19                     | 70,000               | 35                    |
| RS048           | 48           | 400         | PP       | •                | 1,700                | 18                     | 59,500               | 35                    |
| RS053           | 53           | 400         | PP       | 0                | 1,300                | 18                     | 45,500               | 35                    |
| RS058           | 58           | 400         | PP       | •                | 1,100                | 1 <i>7</i>             | 38,500               | 35                    |
| RS063           | 63           | 400         | PP       | 0                | 900                  | 1 <i>7</i>             | 31,500               | 35                    |

### SPECIALTY CONTINUOUS THREAD



| Smooth    | Sida  | Smooth    | Ton |
|-----------|-------|-----------|-----|
| JIIIOOIII | JIUE. | 311100111 | 100 |

| MFG.<br>ITEM ID | SIZE<br>(MM) | NECK FINISH | MATERIAL | MFG.<br>LOCATION | PIECES<br>PER CARTON | CARTON<br>WEIGHT (LBS) | PIECES<br>PER PALLET | CARTONS<br>PER PALLET |
|-----------------|--------------|-------------|----------|------------------|----------------------|------------------------|----------------------|-----------------------|
| BUTTRESS CAP    |              |             |          |                  |                      |                        |                      |                       |
| BB038           | 38           | 430         | PP       | 0                | 800                  | 16.50                  | 28,000               | 35                    |
|                 |              |             |          |                  |                      |                        |                      |                       |
| RIBBED SIDE, N  | NATTE TOP    |             |          |                  |                      |                        |                      |                       |
| 10-2057***      | 20           | 410         | LDPE     | 6                | 7,200                | 33.08                  | 180,000              | 25                    |
| RLO20           | 20           | 410         | PP       | •                | 6,800                | 23                     | 238,000              | 35                    |
| RLO24           | 24           | 410         | PP       | •                | 4,000                | 21                     | 140,000              | 35                    |
|                 |              |             |          |                  |                      |                        |                      |                       |
| RIBBED SIDE, S  | моотн то     | P           |          |                  |                      |                        |                      |                       |
| 10-2092**       | 26           | SP103       | MDPE     | 6                | 3,800                | 30                     | 95,000               | 25                    |
| 10-2059*        | 28           | SP100       | MDPE     | 6                | 4,200                | 29.51                  | 105,000              | 25                    |
| 10-2060***      | 28           | 415         | MDPE     | 6                | 1,950                | 30                     | 48,750               | 25                    |
| RLO28           | 28           | 410         | PP       | •                | 2,700                | 18                     | 94,500               | 35                    |
|                 |              |             |          |                  |                      |                        |                      |                       |
| SMOOTH SIDE,    | SMOOTH T     | ОР          |          |                  |                      |                        |                      |                       |
| 10-5180***      | 18           | 415         | PP       | 6                | 8,200                | 34.77                  | 205,000              | 25                    |
| 10-5181*        | 18           | 415         | PP       | 6                | 8,200                | 34.77                  | 205,000              | 25                    |

<sup>\*</sup>Sealing Type - Land Seal \*\*Sealing Type - Valve Seal \*\*\*Sealing Type - Plug Seal

## SPECIALTY CONTINUOUS THREAD (continued)



| MFG.<br>ITEM ID  | SIZE<br>(MM) | NECK FINISH     | MATERIAL | MFG.<br>LOCATION | PIECES<br>PER CARTON | CARTON<br>WEIGHT (LBS) | PIECES<br>PER PALLET | CARTONS<br>PER PALLET |
|------------------|--------------|-----------------|----------|------------------|----------------------|------------------------|----------------------|-----------------------|
| BROAD RIBBED     |              |                 |          |                  |                      |                        |                      |                       |
| SP063            | 63           | 485             | PP       | •                | 500                  | 14.50                  | 1 <i>7,</i> 500      | 35                    |
| SP064            | 64           | 485             | PP       | •                | 500                  | 15                     | 1 <i>7,</i> 500      | 35                    |
| SP070            | 70           | 450             | PP       | •                | 500                  | 14                     | 1 <i>7</i> ,500      | 35                    |
|                  |              |                 |          |                  |                      |                        |                      |                       |
| SMOOTH SIDE, S   | моотн то     | OP, OUTER STACK | ING RING |                  |                      |                        |                      |                       |
| GG070            | 70           | 450             | PP       | •                | 560                  | 15.50                  | 19,600               | 35                    |
| GG083            | 83           | 445             | PP       | •                | 370                  | 15                     | 12,950               | 35                    |
|                  |              |                 |          |                  |                      |                        |                      |                       |
| RIBBED SIDE, MA  | ITE TOP, O   | UTER STACKING   | RING     |                  |                      |                        |                      |                       |
| RG070            | 70           | 450             | PP       | •                | 560                  | 16.50                  | 19,600               | 35                    |
|                  |              |                 |          |                  |                      |                        |                      |                       |
| RIBBED SIDE, SMO | оотн тор     | , OUTER STACKIN | IG RING  |                  |                      |                        |                      |                       |
| RG083            | 83           | 445             | PP       | 0                | 370                  | 15.50                  | 12,950               | 35                    |

## SPECIALTY CONTINUOUS THREAD (continued)



| MFG.<br>ITEM ID | SIZE<br>(MM)  | NECK FINISH    | MATERIAL     | MFG.<br>LOCATION | PIECES<br>PER CARTON | CARTON<br>WEIGHT (LBS) | PIECES<br>PER PALLET | CARTONS<br>PER PALLET |
|-----------------|---------------|----------------|--------------|------------------|----------------------|------------------------|----------------------|-----------------------|
| EZ-GRIP, BRC    | AD RIBBED     |                |              |                  |                      |                        |                      |                       |
| EG033           | 33            | 400            | PP           | •                | 3,500                | 25.60                  | 122,500              | 35                    |
| EG038           | 38            | 400            | PP           | •                | 2,600                | 20.95                  | 91,000               | 35                    |
| EG045           | 45            | 400            | PP           | •                | 1,100                | 26                     | 38,500               | 35                    |
| EG053           | 53            | 400            | PP           | •                | 1,300                | 18                     | 54,600               | 42                    |
| SPICE CAP, SA   | MOOTH SIDE,   | SMOOTH TOP, IN | INER STACKIN | IG RING          |                      |                        |                      |                       |
| SI043           | 43            | 485            | PP           | •                | 1,400                | 16.50                  | 49,000               | 35                    |
| SI048           | 48            | 485            | PP           | •                | 1,100                | 1 <i>7</i>             | 38,500               | 35                    |
| SI053           | 53            | 485            | PP           | •                | 900                  | 16                     | 31,500               | 35                    |
| SI063           | 63            | 485            | PP           | 0                | 600                  | 15.50                  | 21,000               | 35                    |
| SPICE CAP, SA   | MOOTH SIDE, S | sмоотн тор, о  | UTER STACKII | NG RING          |                      |                        |                      |                       |
| SO043           | 43            | 485            | PP           | 0                | 1,400                | 16.50                  | 49,000               | 35                    |
| SO048           | 48            | 485            | PP           | 0                | 1,100                | 1 <i>7</i>             | 38,500               | 35                    |
| DS053           | 53            | 490            | PP           | 0                | 700                  | 15                     | 24,500               | 35                    |
| SO053           | 53            | 485            | PP           | •                | 900                  | 16                     | 31,500               | 35                    |
| SO063           | 63            | 485            | PP           | 0                | 600                  | 15.50                  | 21,000               | 35                    |
| DOME            |               |                |              |                  |                      |                        |                      |                       |
| DD033           | 33            | 400            | PP           | •                | 4,000                | 23                     | 140,000              | 35                    |
| DM033           | 33            | 400            | PS           | •                | 4,023                | 29                     | 168,966              | 42                    |
| DM043           | 43            | 400            | PS           | •                | 2,112                | 24.10                  | 88,704               | 42                    |
| DD053           | 53            | 400            | PP           | •                | 1,400                | 1 <i>7</i>             | 49,000               | 35                    |
| DD058           | 58            | 400            | PP           | •                | 1,100                | 1 <i>7</i>             | 38,500               | 35                    |
| DD070           | 70            | 400            | PP           | •                | <i>7</i> 60          | 17.50                  | 26,600               | 35                    |
| DD089           | 89            | 400            | PP           | •                | 456                  | 18                     | 12,768               | 28                    |
|                 |               |                |              |                  |                      |                        |                      |                       |

### **CHILD RESISTANT**

In the highly regulated pharmaceutical market, reliable, child resistant closures are essential. MRP Solutions child resistant closures safely secure your product while ensuring compliance with rigorous protocol testing to meet Consumer Product Safety Commission (CPSC) standards. Our many designs offer just the right option for safe product storage and include text, debossed, embossed, and pictorial selections.

Ideal markets: Pharmaceuticals, nutraceuticals, homecare and automotive

Stocking: White and black closures in stock and ready to ship





Pictorial



**Embossed** 









Debossed

Chem Lock

Sleek CR®

Encore CR

| MFG.<br>ITEM ID | SIZE<br>(MM)     | NECK<br>FINISH | MATERIAL | MFG.<br>LOCATION | PIECES<br>PER CARTON | CARTON<br>WEIGHT (LBS) | CARTONS<br>PER PALLET |
|-----------------|------------------|----------------|----------|------------------|----------------------|------------------------|-----------------------|
| EZ-SAFE®        |                  |                |          |                  |                      |                        |                       |
| ES028           | 28               | 400            | CPP, PP  | 0                | 2,500                | 28.16                  | 42                    |
| ES033           | 33               | 400            | CPP, PP  | P                | 2,000                | 27.75                  | 42                    |
| ES038           | 38               | 400            | CPP, PP  | <b>D</b>         | 1,500                | 25.90                  | 42                    |
| ES045           | 45               | 400            | CPP, PP  | •                | 1,100                | 28.35                  | 42                    |
| PUSH DOWN & TU  | JRN (PDT) – DEBO | SSED           |          |                  |                      |                        |                       |
| DB033           | 33               | 400            | CPP, PP  | <b>P</b>         | 2,000                | 28                     | 30                    |
| DB038           | 38               | 400            | CPP, PP  | P                | 1,500                | 26                     | 30                    |
| DB053           | 53               | 400            | CPP, PP  | <b>D</b>         | <i>7</i> 50          | 24                     | 30                    |



Vented CR

| MFG.<br>ITEM ID  | SIZE<br>(MM)     | NECK<br>FINISH | MATERIAL | MFG.<br>LOCATION | PIECES<br>PER CARTON | CARTON<br>WEIGHT (LBS)                       | CARTONS<br>PER PALLET |
|------------------|------------------|----------------|----------|------------------|----------------------|--|-----------------------|
| PUSH DOWN & T    | URN (PDT) - EMBC | SSED           |          |                  |                      |  |                       |
| PD020            | 20               | 400            | CPP, PP  | 0                | 4,900                | 31.50  | 30                    |
| PD022            | 22               | 400            | CPP, PP  | •                | 4,500                | 36   | 30                    |
| PD024            | 24               | 400            | CPP, PP  | 0                | 3,200                | 35   | 30                    |
| PD028            | 28               | 400            | CPP, PP  | •                | 2,500                | 28   | 30                    |
| PD033            | 33               | 400            | CPP, PP  | •                | 2,000                | 28   | 30                    |
| PD038            | 38               | 400            | CPP, PP  | •                | 1,500                | 26   | 30                    |
| PD045            | 45               | 400            | CPP, PP  | 0                | 1,100                | 26   | 30                    |
| PD053            | 53               | 400            | CPP, PP  | •                | 750                  | 24   | 30                    |
| PD063            | 63               | 400            | CPP, PP  | 0                | 600                  | 23.60  | 30                    |
| PICTORIAL        |                  |                |          |                  |                      |  |                       |
| CR020            | 20               | 400            | CPP, PP  | 0                | 4,900                | 31.50  | 30                    |
| CR022            | 22               | 400            | CPP, PP  | •                | 4,500                | 36   | 30                    |
| CR024            | 24               | 400            | CPP, PP  | •                | 3,200                | 35   | 30                    |
| CR028            | 28               | 400            | CPP, PP  | •                | 2,500                | 28   | 30                    |
| CR033            | 33               | 400            | CPP, PP  | •                | 2,000                | 28   | 30                    |
| CR038            | 38               | 400            | CPP, PP  | •                | 1,500                | 26   | 30                    |
| CR045            | 45               | 400            | CPP, PP  | 0                | 1,100                | 26   | 30                    |
| CR053            | 53               | 400            | CPP, PP  | •                | 750                  | 24   | 30                    |
| CR063            | 63               | 400            | CPP, PP  | •                | 600                  | 23.60  | 30                    |
| CR070            | 70               | 400            | CPP, PP  | •                | 400                  | 18.95  | 30                    |
| CR089            | 89               | 400            | CPP, PP  | 0                | 225                  | 18.20  | 30                    |
| CHEM LOCK TAB    |                  |                |          |                  |                      |  |                       |
| CL038            | 38               | 400            | PP       | 0                | 1,400                | 14.60  | 35                    |
| VENTED CR - PUS  | H DOWN & TURN    | (PDT) – EMBOS  | SED      |                  |                      |  |                       |
| PH038            | 38               | 400            | CPP, PP  | 0                | 1,500                | 26.90 (single lined)<br>28.88 (double lined) | 30                    |
| VENTED CR - PICT | ORIAL            |                |          |                  |                      |  |                       |
| CH038            | 38               | 400            | CPP, PP  | 0                | 1,500                | 26.90 (single lined)<br>28.88 (double lined) | 30                    |
| SLEEK CR®        |                  |                |          |                  |                      |  |                       |
| SK053            | 53               | 400            | CPP, PP  | •                | 750                  | 24.7   | 30                    |
| SK063            | 63               | 400            | CPP, PP  | •                | 600                  | 24.6   | 30                    |
| SK070            | 70               | 400            | CPP, PP  | 0                | 400                  | 19.5   | 30                    |
| ENCORE CR        |                  |                |          |                  |                      |  |                       |
| SK063            | 63               | 400            | CPP, PP  | 0                | 600                  | 23.6   | 30                    |
|                  |                  |                | ,        |                  |                      |  |                       |

### HINGED DISPENSING

Dispensing vitamins and supplements has never been easier. Utilizing hinged dispensing closures specifically designed for pills, the NutraFlapper®, NutraGen II® and Hinge Guard closures offer one-handed, senior-friendly, easy opening and controlled pouring. This ensures there are no contaminated medicines put back into the container. All of these hinged dispensing options offer a full pour orifice and smooth skirt.

**Ideal markets:** Nutraceuticals, pharmaceuticals



| MFG.<br>ITEM ID | SIZE<br>(MM) | NECK<br>FINISH | MATERIAL | MFG.<br>LOCATION | PIECES<br>PER CARTON | CARTON<br>WEIGHT (LBS) | CARTONS<br>PER PALLET |
|-----------------|--------------|----------------|----------|------------------|----------------------|------------------------|-----------------------|
| HINGE GUARD     |              |                |          |                  |                      |                        |                       |
| JT033           | 33           | 400            | LDPE     | 0                | 2,950                | 21                     | 35                    |
| JT038           | 38           | 400            | LDPE     | <b>e</b>         | 2,100                | 18                     | 35                    |
| JT045           | 45           | 400            | LDPE     | 0                | 1,700                | 19                     | 35                    |
| JT053           | 53           | 400            | LDPE     | 0                | 1,300                | 18                     | 35                    |
|                 |              |                |          |                  |                      |                        |                       |
| NUTRAGEN II®    |              |                |          |                  |                      |                        |                       |
| 33-400 NGII     | 33           | 400            | PP       | 0                | 2,900                | 26                     | 42                    |
| 38-400 NGII     | 38           | 400            | PP       | 0                | 2,300                | 26                     | 42                    |
| 45-400 NGII     | 45           | 400            | PP       | •                | 1,600                | 23                     | 42                    |
| 53-400 NGII     | 53           | 400            | PP       | 0                | 1,000                | 20                     | 42                    |
|                 |              |                |          |                  |                      |                        |                       |
| NUTRAFLAPPER    | B            |                |          |                  |                      |                        |                       |
| 33-400 NF       | 33           | 400            | PP       | 0                | 2,900                | 26                     | 42                    |
| 38-400 NF       | 38           | 400            | PP       | 0                | 2,300                | 26                     | 42                    |
| 45-400 NF       | 45           | 400            | PP       | 0                | 1,600                | 23                     | 42                    |
| 53-400 NF       | 53           | 400            | PP       | 0                | 1,000                | 23                     | 42                    |

### HINGED LIQUID DISPENSING

Control the direction and amount of liquid products poured with the LiquiFlapper® and Ultra Light® closures. These patented, award-winning designs ensure there is no mess, no sticky bottles and many pleased consumers.

Ideal markets: Salad dressings, marinades, sauces, syrups, honey and squeezable condiments

Stocking: Our most popular Ultra Light 38mm, .250 in orifice in stock and ready to ship in black, white or yellow



Smooth, Large Tear Drop LiquiFlapper®

| MFG.<br>ITEM ID | SIZE<br>(MM) | NECK<br>FINISH | MATERIAL | EXTERIOR SKIRT<br>FINISH | ORIFICE/<br>DISPENSING OPTION | MFG.<br>LOCATION | PIECES<br>PER<br>CARTON | CARTON<br>WEIGHT<br>(LBS) | CARTONS<br>PER PALLET |
|-----------------|--------------|----------------|----------|--------------------------|-------------------------------|------------------|-------------------------|---------------------------|-----------------------|
| ULTRA LIGHT®    |              |                |          |                          |                               |                  |                         |                           |                       |
| 10-2153         | 38           | 400            | PP       | Ribbed                   | .250                          | 6                | 2,350                   | 31                        | 25                    |
| 10-2156         | 38           | 400            | PP       | Ribbed                   | .375                          | 6                | 2,350                   | 31                        | 25                    |
| 10-2155         | 38           | 400            | PP       | Ribbed                   | .500                          | 6                | 2,350                   | 31                        | 25                    |
|                 |              |                |          |                          |                               |                  |                         |                           |                       |
| LIQUIFLAPPER®   |              |                |          |                          |                               |                  |                         |                           |                       |
| 33-400 LF       | 33           | 400            | PP       | Smooth                   | Directional Tear Drop         | 0                | 2,900                   | 26                        | 42                    |
| 38-400 LF       | 38           | 400            | PP       | Smooth/Ribbed            | Directional Tear Drop-Large   | 0                | 2,300                   | 28                        | 42                    |
| 38-400 LF       | 38           | 400            | PP       | Smooth/Ribbed            | Directional Tear Drop-Med.    | 0                | 2,300                   | 28                        | 42                    |

### HINGED SINGLE FLAP DISPENSING

The FlapMate, Single-Flap Flapper and SpiceGen II™ closures have standardized dry food dispensing. With a contemporary look and smooth skirt finish for shelf impact and a one-piece design, these caps are easy to open, close and dispense, ensuring product freshness and functionality.

Ideal markets: Spice and seasonings, confectionery, dry creamers, toppings, nuts and seeds, pet food, supplements, cereal and baby snacks



| FLAPMATE®  43-485 FM  | 42<br>42<br>42<br>42 |
|---|----------------------|
| 43-485 FM 43 485 PP .200  | 42<br>42             |
| 43-485 FM 43 485 PP .300  | 42                   |
| 43-485 FM   |                      |
| FLAPPER®         38-485       38       485       PP       .110       0       2,000       24         38-485       38       485       PP       .200       0       2,000       24         38-485       38       485       PP       Pour       0       2,000       24 | 12                   |
| 38-485     38     485     PP     .110     0     2,000     24       38-485     38     485     PP     .200     0     2,000     24       38-485     38     485     PP     Pour     0     2,000     24  | 42                   |
| 38-485 38 485 PP 200  |                      |
| 38-485 38 485 PP Pour <b>©</b> 2,000 24   | 42                   |
|   | 42                   |
| 63-400 SF 63 400 PP Pour <b>©</b> 950 26  | 42                   |
|   | 28                   |
| 63-400 SF 63 400 PP Directional Pour <b>9</b> 950 26  | 28                   |
| 63-400 SF EH 63 400 PP Pour <b>©</b> 850 25   | 28                   |
| 63-400 SF EH 63 400 PP Directional Pour <b>0</b> 850 25   | 28                   |
| SPICEGEN II™  |                      |
| 38-400 SG II 38 400 PP .125 <b>0</b> 2,300 27   | 42                   |
| 38-400 SG II 38 400 PP .300 <b>0</b> 2,300 27   | 42                   |
| 38-400 SG II 38 400 PP Full Pour <b>0</b> 2,300 25  | 42                   |

### HINGED DUAL FLAP DISPENSING

Shake it. Pour it. Spoon it. With the versatility of the Flapper® dual-flap closure, consumers can dispense just the right amount of a product without ever removing a cap. The contemporary style provides shelf impact while ensuring product freshness and functionality. The variety of dispensing combinations available – Directional Pour, Pour, Sift – make this a versatile closure for many dry products.

Ideal markets: Spice and seasonings, confectionery and sweeteners, grated cheese, nuts and snacks, personal care, pet food and homecare













Hinged Dual Flapper®

| MFG.<br>ITEM ID | SIZE<br>(MM) | NECK<br>FINISH | MATERIAL | ORIFICE/<br>DISPENSING OPTION | MFG.<br>LOCATION | PIECES<br>PER CARTON | CARTON<br>WEIGHT (LBS) | CARTONS<br>PER PALLET |
|-----------------|--------------|----------------|----------|-------------------------------|------------------|----------------------|------------------------|-----------------------|
| DUAL FLAPPER®   |              |                |          |                               |                  |                      |                        |                       |
| 48-485          | 48           | 485            | PP       | .100/.300                     | 0                | 1,000                | 21                     | 42                    |
| 48-485          | 48           | 485            | PP       | .200/Pour                     | •                | 1,000                | 21                     | 42                    |
| 53-485 SR       | 53           | 485            | PP       | .200/Pour                     | •                | 850                  | 22                     | 42                    |
| 53-485 SR       | 53           | 485            | PP       | .300/Pour                     | 0                | 850                  | 22                     | 42                    |
| 53-485 SRII     | 53           | 485            | PP       | Directional Pour/ Pour        | •                | 850                  | 22                     | 42                    |
| 53-485 SRII     | 53           | 485            | PP       | .100/.300                     | •                | 850                  | 22                     | 42                    |
| 53-485 SRII     | 53           | 485            | PP       | .100/Pour                     | •                | 850                  | 22                     | 42                    |
| 63-400 EH SR    | 63           | 400            | PP       | .125/Pour                     | •                | 900                  | 25                     | 28                    |
| 63-400 EH SR    | 63           | 400            | PP       | .250/Pour                     | 0                | 900                  | 25                     | 28                    |
| 63-400 SR       | 63           | 400            | PP       | .127/Pour                     | •                | 1,000                | 25                     | 28                    |
| 63-400 SR       | 63           | 400            | PP       | .300/Pour                     | 0                | 1,000                | 25                     | 28                    |
| 63-400 SR       | 63           | 400            | PP       | .450/Pour                     | •                | 1,000                | 25                     | 28                    |
| 63-485          | 63           | 485            | PP       | .200/Pour                     | 0                | 600                  | 19                     | 28                    |
| 63-485          | 63           | 485            | PP       | .300/Pour                     | •                | 600                  | 19                     | 28                    |
| 63-485          | 63           | 485            | PP       | .125/Pour                     | 0                | 600                  | 19                     | 28                    |
| 63-485          | 63           | 485            | PP       | .450/Pour                     | •                | 600                  | 19                     | 28                    |
| 63-485 SR       | 63           | 485            | PP       | Directional Pour/ Pour        | •                | 800                  | 22.6                   | 28                    |
| 63-485 SR       | 63           | 485            | PP       | .125/.300                     | 0                | 800                  | 22.6                   | 28                    |
| 70-450          | 70           | 450            | PP       | .470/Pour                     | •                | 450                  | 18                     | 28                    |

### HINGED LARGE FORMAT DISPENSING

The bulky size of large-diameter containers makes dispensing difficult, yet easy dispensing is a must in any application. MRP Solutions's large-format closures, including the Flapper® and MegaFlap®, allow easy access to products and control when pouring. The new MegaFlap offers a full open flap and provides a scoop-retention feature to hold a measuring scoop. The 110 mm Flapper offers a lightweight closure with both slotted and pourable orifices.

Ideal markets: Nutritional powders, snacks, lawn care, pet foods and treats, dry chemical and ice melt



MFG. ITEM ID SIZE (MM) NECK FINISH ORIFICE/ DISPENSING OPTION MFG. LOCATION PIECES PER CARTON CARTON WEIGHT (LBS) CARTONS PER PALLET MATERIAL **FLAPPER®** 0 89-400 400 PP 300 21 89 Pour 28 0 .300 89-400 89 400 PP 300 21 28 0 89-400 89 400 PP Slotted 300 21 28 0 89-400 89 400 PP Trapezoid 300 21 28 110-400 110 400 PP Pour O 300 23 28 110-400 110 400 PP Slotted 0 300 23 28 **MEGAFLAP®** 14 120-400 120 400 PP Full Open 154 42 120-400 EH 120 400 PP O 132 15.20 Full Open 42



### STRAP CAPS

Whether you want your package sealed securely to keep it from leaking or to keep contaminants from getting into your liquid, strap caps are an ideal solution. MRP Solutions offers many unique designs and orifice sizes to securely store a variety of liquids from charcoal lighter to saline solution. Where applicable, these closures conform to all child resistant protocol guidelines in accordance with the Consumer Product Safety Commission (CPSC).



| MFG.<br>ITEM ID | SIZE<br>(MM) | NECK<br>FINISH | MATERIAL | EXTERIOR<br>SKIRT FINISH | ORIFICE/<br>DISPENSING<br>OPTION | SEALING<br>TYPE | MFG.<br>LOCATION | PIECES<br>PER CARTON | CARTON<br>WEIGHT<br>(LBS) | Cartons<br>Per<br>Pallet |
|-----------------|--------------|----------------|----------|--------------------------|----------------------------------|-----------------|------------------|----------------------|---------------------------|--------------------------|
| CAN FITM        | MENT         |                |          |                          |                                  |                 |                  |                      |                           |                          |
| 10-4476         | 0.954        |                | LDPE     | Smooth Snap Fit          | .066                             |                 | 6                | 5,200                | 41.37                     | 25                       |
| 10-4495         | 0.954        |                | LDPE     | CRC Ribbed Snap Fit      | .426                             |                 | 6                | 3,500                | 40.63                     | 25                       |
| 10-4497         | 0.954        |                | LDPE     | CRC Ribbed Snap Fit      | .120                             |                 | <b>G</b>         | 3,500                | 41.37                     | 25                       |
|                 |              |                |          |                          |                                  |                 |                  |                      |                           |                          |
| CHARCO          | _            | ER CRC         | LDDE     | Character by             | 2 @ 050                          | DI              | 0                | 0.000                | 25.50                     | 0.5                      |
| 10-6153         | 28           |                | LDPE     | Charcoal Lighter         | 3 @ .058                         | Plug            | 6                | 2,000                | 35.59                     | 25                       |
| 10-6154         | 28           |                | LDPE     | Charcoal Lighter         | .113                             | Plug            | 6                | 2,000                | 35.70                     | 25                       |
| 10-6155         | 28           |                | LDPE     | Charcoal Lighter         | .250                             | Plug            | 6                | 2,000                | 35.32                     | 25                       |
| 10-6156         | 33           |                | LDPE     | Charcoal Lighter         | 3 @ .029                         | Plug            | 6                | 2,000                | 32.60                     | 25                       |
|                 |              |                |          |                          |                                  |                 |                  |                      |                           |                          |
| STRAP CA        |              |                |          |                          |                                  |                 |                  |                      |                           |                          |
| 10-1373         | 15           | 410            | LDPE     | Ribbed                   | .009                             | Plug            | 6                | 9,800                | 50.32                     | 25                       |
| 10-1375         | 15           | 410            | LDPE     | Ribbed Snap Fit          | .031                             | Plug            | 3                | 9,800                | 47.14                     | 25                       |
| 10-1376         | 15           | 410            | LDPE     | Ribbed Snap Fit          | .062                             | Plug            | 6                | 9,800                | 49.91                     | 25                       |
| 10-1378         | 15           | 410            | LDPE     | Ribbed                   | .031                             | Plug            | 6                | 9,800                | 50.34                     | 25                       |
| 10-1379         | 15           | 410            | LDPE     | Ribbed                   | .060                             | Plug            | 6                | 9,800                | 49.52                     | 25                       |
| 10-1704         | 18           | 400            | LDPE     | Ribbed                   | .025                             | Side Seal       | (3)              | 8,000                | 34.49                     | 25                       |
| 10-1713         | 18           | 400            | LDPE     | Ribbed Snap Fit          | .025                             | Plug            | <u>(S</u>        | 8,000                | 37.95                     | 25                       |
| 10-1834         | 20           | 410            | LDPE     | Ribbed                   | .110                             | Side Seal       | 6                | 4,300                | 26.20                     | 25                       |
| 10-1964         | 24           | 410            | LDPE     | Ribbed                   | .084                             | Valve Seal      | 6                | 3,300                | 36.85                     | 25                       |
| 10-1965         | 24           | 410            | LDPE     | Ribbed                   | .122                             | Valve Seal      | <u>(S</u>        | 3,300                | 38.56                     | 25                       |
| 10-1976         | 24           | 410            | LDPE     | Ribbed Snap Fit          | .028                             | Plug            | 6                | 1,900                | 14.98                     | 25                       |
| 10-1977         | 24           | 410            | LDPE     | Ribbed Snap Fit          | .040                             | Plug            | 6                | 1,900                | 14.98                     | 25                       |
| 10-2150         | 38           | 400            | MDPE     | Ribbed                   | .250                             | Top Seal        | 6                | 1,700                | 37                        | 25                       |
| 10-6401         | 33           | 400            | MDPE     | Ribbed                   | .250                             | Top Seal        | 6                | 2,350                | 28.62                     | 25                       |
| 10-6402         | 33           | 400            | MDPE     | Ribbed                   | .625                             | Top Seal        | 6                | 2,350                | 38.98                     | 25                       |
|                 |              |                |          |                          |                                  |                 |                  |                      |                           |                          |

### PUSH/PULL

The easy-open push/pull closures help consumers prevent messes with clean, directional pour dispensing. This closure type includes a back-off resister bead that helps prevent accidental opening of products. The cover cap shape allows easy gripping during opening and closing. To use, consumers simply pull up on the spout to open and push downwards until the bead is showing to close.

Ideal markets: Personal care, homecare and automotive





Push/Pull

| MFG.<br>ITEM ID | SIZE<br>(MM) | NECK<br>FINISH | MATERIAL | ORIFICE/<br>DISPENSING OPTION | MFG.<br>LOCATION | PIECES<br>PER CARTON | Carton<br>Weight (LBS) | CARTONS<br>PER PALLET |
|-----------------|--------------|----------------|----------|-------------------------------|------------------|----------------------|------------------------|-----------------------|
| PUSH/PULL       |              |                |          |                               |                  |                      |                        |                       |
| 10-2091         | 26           | SP103          | MDPE     | .143                          | 3                | 3,100                | 33                     | 25                    |
| 10-2094         | 26           | SP103          | LDPE     | .094                          | (5)              | 3,100                | 33                     | 25                    |
| 10-2053         | 28           | SP100          | MDPE     | .143                          | 6                | 3,400                | 32.87                  | 25                    |
| 10-2054         | 28           | SP100          | LDPE     | .094                          | 6                | 3,400                | 33.35                  | 25                    |

### **DISPENSING PLUGS**

MRP Solutions's dispensing plugs, also known as orifice reducers, are available in a variety of sizes to accommodate multiple viscosities. They can be used in conjunction with a CT or cover cap. Dispensing plugs can be inserted in multiple neck finishes and allow for controlled dispensing of liquid products.

Our latest innovation, the AccuDose™ Liner, is a tamper-evident liner that provides controlled dispensing for pills or other small pieces contained in bottles. The liner's shape is easily adaptable to any product size with simple orifice size and shape adjustments, and requires no packaging changes. The AccuDose Liner is compatible with all container and closure designs.

Ideal markets: Pharmaceutical, nutraceutical, automotive and homecare



| MFG.<br>ITEM ID | SIZE<br>(MM) | MATERIAL | ORIFICE/<br>DISPENSING OPTION | FIT DIAMETER | MFG.<br>LOCATION | PIECES<br>PER CARTON | CARTON<br>WEIGHT (LBS) | CARTONS<br>PER PALLET |
|-----------------|--------------|----------|-------------------------------|--------------|------------------|----------------------|------------------------|-----------------------|
| DISPENSING      | PLUGS        |          |                               |              |                  |                      |                        |                       |
| 10-1757         | 18           | LDPE     | .092                          | .497         | 6                | 30,000               | 40.28                  | 25                    |
| 10-1819         | 20           | LDPE     | .121                          | .546         | 6                | 13,600               | 26                     | 25                    |
| 10-1841         | 20           | LDPE     | .224                          | .61          | 6                | 15,000               | 34.98                  | 25                    |
| 10-1849         | 22           | LDPE     | .092                          | .632         | 6                | 30,000               | 29.33                  | 25                    |
| 10-1911         | 24           | LDPE     | .034                          | .708         | 6                | 12,500               | 33.26                  | 25                    |
| 10-1923         | 24           | LDPE     | .09                           | .742         | 6                | 11,900               | 31.20                  | 25                    |
| 10-1912         | 24           | LDPE     | .109                          | .708         | 6                | 12,300               | 33.06                  | 25                    |
| 10-1930         | 24           | LDPE     | .12                           | .782         | 6                | 10,500               | 32.82                  | 25                    |
| 10-1271         | 28           | LDPE     | .07                           | .854         | 6                | 7,200                | 30.32                  | 25                    |
| 10-1273         | 28           | LDPE     | .07                           | .862         | 6                | 1,700                | 33.64                  | 25                    |
| 10-1274         | 28           | LDPE     | .140                          | .854         | 6                | 7,200                | 30.73                  | 25                    |

### TWIST OPEN - TWIST CLOSE

The distinct streamlined shape of MRP Solutions's twist open – twist close dispensing closures combined with fresh new color options gives any package instant shelf appeal. With smooth, easy opening and closing and pinpoint dispensing accuracy, twist open - twist close closures have a clearly visible sealing indicator that prevents product leakage, drying and clogging. Closures are available in a variety of orifice sizes, sealing types, diameters and finishes.

Ideal markets: Hair care applicators, hobby and craft, food condiments, pharmaceuticals, OTC ointments and creams and pet applications



| MFG.<br>ITEM ID  | SIZE<br>(MM) | NECK<br>FINISH | MATERIAL | ORIFICE/<br>DISPENSING<br>OPTION | SEALING<br>TYPE | MFG.<br>LOCATION | PIECES<br>PER<br>CARTON | CARTON<br>WEIGHT<br>(LBS) | Cartons<br>Per<br>Pallet | NO<br>LINING<br>AVAILABLE |
|------------------|--------------|----------------|----------|----------------------------------|-----------------|------------------|-------------------------|---------------------------|--------------------------|---------------------------|
| TWIST OPE        | N-CLOSE I    | RIBBED SK      | IRT      |                                  |                 |                  |                         |                           |                          |                           |
| 10-1612          | 18           | 410            | LDPE     | .073                             | Plug            | 6                | 6,000                   | 42                        | 25                       | х                         |
| 10-1 <i>77</i> 1 | 20           | 410            | LDPE     | .025                             | Side Seal       | 6                | 5,000                   | 39                        | 25                       | х                         |
| 10-1788          | 20           | 410            | LDPE     | .025                             | Plug            | 6                | 5,000                   | 42                        | 25                       | х                         |
| 10-1 <i>77</i> 3 | 20           | 410            | LDPE     | .08                              | Side Seal       | 6                | 5,000                   | 39                        | 25                       | х                         |
| 10-1787          | 20           | 410            | LDPE     | .08                              | Plug            | 6                | 5,000                   | 42                        | 25                       | х                         |
| 10-1 <i>77</i> 2 | 20           | 410            | LDPE     | .114                             | Side Seal       | 6                | 5,000                   | 37.94                     | 25                       | х                         |
| 10-1789          | 20           | 410            | LDPE     | .114                             | Plug            | 6                | 5,000                   | 42                        | 25                       | х                         |
| 10-7138          | 22           | 410            | LDPE     | .01                              | Plug            | <b>S</b>         | 4,200                   | 47                        | 25                       | х                         |
| 10-1981          | 24           | 410            | LDPE     | .025                             | Side Seal       | 6                | 4,200                   | 35.02                     | 25                       |                           |
| 10-1998          | 24           | 410            | LDPE     | .025                             | Plug            | <b>S</b>         | 4,200                   | 36.16                     | 25                       | x                         |
| 10-1973          | 24           | 410            | LDPE     | .073                             | Side Seal       | 6                | 4,000                   | 33.38                     | 25                       |                           |
| 10-1982          | 24           | 410            | LDPE     | .08                              | Side Seal       | 6                | 4,200                   | 35.02                     | 25                       |                           |
| 10-1999          | 24           | 410            | LDPE     | .08                              | Plug            | 6                | 4,200                   | 36.20                     | 25                       | х                         |
| 10-1980          | 24           | 410            | LDPE     | .114                             | Side Seal       | 6                | 4,200                   | 34.22                     | 25                       |                           |
| 10-1997          | 24           | 410            | LDPE     | .114                             | Plug            | 6                | 4,200                   | 35.36                     | 25                       | х                         |
| 10-1979          | 24           | 410            | LDPE     | .375 x .062                      | Side Seal       | 6                | 3,000                   | 35                        | 25                       |                           |

## TWIST OPEN - TWIST CLOSE (continued)









Twist Open-Close Smooth Skirt

| MFG.<br>ITEM ID | SIZE<br>(MM) | NECK<br>FINISH | MATERIAL | ORIFICE/<br>DISPENSING<br>OPTION | SEALING TYPE           | MFG.<br>LOCATION | PIECES<br>PER<br>CARTON | CARTON<br>WEIGHT<br>(LBS) | CARTONS<br>PER<br>PALLET | NO LINING<br>AVAILABLE |
|-----------------|--------------|----------------|----------|----------------------------------|------------------------|------------------|-------------------------|---------------------------|--------------------------|------------------------|
| TWIST OPE       | N-CLOSE      | RIBBED S       | KIRT     |                                  |                        |                  |                         |                           |                          |                        |
| 10-2074         | 28           | 410            | LDPE     | .025                             | Valve Seal             | 6                | 2,200                   | 25.01                     | 25                       |                        |
| 10-2087         | 28           | 410            | LDPE     | .08                              | Valve Seal             | 6                | 2,200                   | 25.45                     | 25                       |                        |
| 10-2085         | 28           | 410            | LDPE     | .114                             | Valve Seal             | 6                | 2,200                   | 25.01                     | 25                       |                        |
| 10-2073         | 28           | SP100          | LDPE     | .166                             | Valve Seal             | 6                | 2,200                   | 25.01                     | 25                       |                        |
| 10-2117         | 33           | 455            | LDPE     | .174                             | Top Seal               | 6                | 1,900                   | 31.68                     | 25                       |                        |
| 10-2118         | 33           | 455            | LDPE     | .174                             | Top Seal               | 6                | 1,900                   | 30.02                     | 25                       |                        |
| 10-2121         | 33           | 455            | LDPE     | .174                             | Top Seal               | 6                | 2,000                   | 30.98                     | 25                       |                        |
| 10-2122         | 33           | 455            | LDPE     | .174                             | Top Seal               | 6                | 2,000                   | 30.98                     | 25                       |                        |
| 10-2116         | 38           | 400            | LDPE     | .114                             | Side Seal              | 6                | 2,000                   | 23.47                     | 25                       | x                      |
| 10-2129         | 38           | 400            | LDPE     | .174                             | Top Seal               | <b>G</b>         | 2,000                   | 27.63                     | 25                       |                        |
| 10-2131         | 38           | 400            | LDPE     | .174                             | Top Seal               | 6                | 2,000                   | 32                        | 25                       |                        |
|                 |              |                |          |                                  |                        |                  |                         |                           |                          |                        |
| TWIST OPE       | N-CLOSE      | SMOOTH         | I SKIRT  |                                  |                        |                  |                         |                           |                          |                        |
| 10-2144         | 38           | 400            | LDPE     | .181                             | Top Seal               | 9                | 1,900                   | 31.52                     | 25                       |                        |
| 10-2148         | 38           | 400            | LDPE     | .181                             | Plug with vinegar trap | 9                | 1,900                   | 33.83                     | 25                       | х                      |
| 10-2149         | 38           | 400            | LDPE     | .181                             | Top Seal               | 6                | 1,900                   | 31.56                     | 25                       |                        |

### **DISC TOPS**

Stylish. Elegant. Easy to use. Featuring a simple snap, disc top closures are ready to dispense without a mess and securely close just as easily. Adding a customized color to this standard closure enhances branding and helps define products on the shelf.

Ideal markets: Health, beauty, personal care, household and automotive chemical



| MFG.<br>ITEM ID | SIZE<br>(MM) | NECK<br>FINISH | MATERIAL | ORIFICE/<br>DISPENSING<br>OPTION | SEALING<br>TYPE | MFG.<br>LOCATION | PIECES<br>PER<br>CARTON | CARTON<br>WEIGHT (LBS) | CARTONS<br>PER PALLET | NO LINING<br>AVAILABLE |
|-----------------|--------------|----------------|----------|----------------------------------|-----------------|------------------|-------------------------|------------------------|-----------------------|------------------------|
| RIBBED DISC T   | ОР           |                |          |                                  |                 |                  |                         |                        |                       |                        |
| 10-5410         | 24           | 410            | PP       | .312 x .110                      | Crab Claw       | 6                | 3,000                   | 31                     | 25                    |                        |
| 10-5412         | 24           | 410            | PP       | .166 x .110                      | Crab Claw       | 6                | 3,000                   | 31                     | 25                    |                        |
| 10-5411         | 24           | 410            | PP       | .312 x .110                      | Plug            | 9                | 3,000                   | 31                     | 25                    | x                      |
| 10-5413         | 24           | 410            | PP       | .166 x .110                      | Plug            | 6                | 3,000                   | 31                     | 25                    | x                      |
| 10-5800         | 28           | 410            | PP       | .343 x .118                      | Crab Claw       | 6                | 2,050                   | 30                     | 25                    |                        |
|                 |              |                |          |                                  |                 |                  |                         |                        |                       |                        |
| SMOOTH DISC     | TOP          |                |          |                                  |                 |                  |                         |                        |                       |                        |
| 10-5301         | 20           | 410            | PP       | .270 x .110                      | Crab Claw       | 6                | 4,700                   | 35                     | 25                    |                        |
| 10-5407*        | 24           | 410            | PP       | .09 x .309                       | Plug            | 6                | 1,800                   | 31                     | 25                    | x                      |
| 10-5402         | 24           | 410            | PP       | .308 x .110                      | Crab Claw       | 6                | 3,000                   | 30                     | 25                    |                        |
| 10-5403         | 24           | 415            | PP       | .308 x .110                      | Crab Claw       | 6                | 2,400                   | 28                     | 25                    |                        |
| 10-5404         | 24           | 410            | PP       | .312 x .110                      | Crab Claw       | 6                | 3,000                   | 28                     | 25                    |                        |
| 10-5700         | 28           | 410            | PP       | .325 x .165                      | Crab Claw       | 6                | 2,050                   | 28                     | 25                    |                        |
| 10-5704         | 28           | 410            | PP       | .325 x .125                      | Crab Claw       | 6                | 2,050                   | 28                     | 25                    |                        |

<sup>\*24/410</sup> Thread/neck finish; 28/410 outer finish.

### OPEN SPOUT, SNIP TIP

Our open spout and snip tip closures offer consumers controlled, directional dispensing for a wide range of products.

Snip tip closures give consumers control over how large or small they want their opening to be. Larger orifices result from snipping the tip close to the base while smaller openings result from snipping closer to the tip. Ideal for one-time-use products, snip tips are perfect for the personal care and homecare markets.

Unlike our snip tips, open spout closures do not require any snipping. Combined with a cover cap, our open spout closures have a large range of orifice sizes to meet your dispensing needs.

Ideal markets: Pharmaceutical, nutraceutical, food, personal care, automotive and hobby



| MFG.<br>ITEM ID | SIZE<br>(MM)  | NECK<br>FINISH | MATERIAL | SPOUT AND<br>TIP HEIGHT | ORIFICE/<br>DISPENSING<br>OPTION | MFG.<br>LOCATION | PIECES<br>PER CARTON | CARTON<br>WEIGHT<br>(LBS) | Cartons<br>Per<br>Pallet |
|-----------------|---------------|----------------|----------|-------------------------|----------------------------------|------------------|----------------------|---------------------------|--------------------------|
| LAND SEAL       | OPEN SPOUT    |                |          |                         |                                  |                  |                      |                           |                          |
| 10-2048         | 24            | 410            | LDPE     | 1.487                   | .09                              | 6                | 2,900                | 28.47                     | 25                       |
|                 |               |                |          |                         |                                  |                  |                      |                           |                          |
| PLUG SEAL       | OPEN SPOUT    |                |          |                         |                                  |                  |                      |                           |                          |
| 10-2359         | 33            | 410            | LDPE     | 1.65                    | .075                             | 6                | 1,600                | 20.97                     | 25                       |
|                 |               |                |          |                         |                                  |                  |                      |                           |                          |
| SIDE SEAL       | OPEN SPOUT    |                |          |                         |                                  |                  |                      |                           |                          |
| 10-1988         | 24            | 410            | LDPE     | 1.347                   | .308 x .076                      | 9                | 2,800                | 23.69                     | 25                       |
| 10-2065         | 24            | 410            | LDPE     | 1.283                   | .042                             | 6                | 4,100                | 25.38                     | 25                       |
| 10-2103         | 38            | 400            | LDPE     | 1.673                   | .06                              | 6                | 2,000                | 20.97                     | 25                       |
|                 |               |                |          |                         |                                  |                  |                      |                           |                          |
| TOP SEAL        | OPEN SPOUT    |                |          |                         |                                  |                  |                      |                           |                          |
| 10-1448         | #16 Tube Neck | Tube           | LDPE     | .971                    | .056                             | 6                | 31,500               | 37.15                     | 25                       |
| 10-1450         | #28 Tube Neck | Tube           | LDPE     | .973                    | .06                              | 6                | 15,500               | 38.35                     | 25                       |
| 10-1451         | #28 Tube Neck | Tube           | LDPE     | .969                    | .028                             | 6                | 15,500               | 30.04                     | 25                       |
|                 |               |                |          |                         |                                  |                  |                      |                           |                          |
| PLUG SEAL       | . SNIP TIP    |                |          |                         |                                  |                  |                      |                           |                          |
| 10-1755         | 20            | 410            | LDPE     | . <i>7</i> 21           | .033                             | 6                | 5,600                | 28.05                     | 25                       |
| 10-1791         | 20            | 410            | LDPE     | 1.232                   | .053                             | 6                | 4,500                | 27.93                     | 25                       |
| 10-1933         | 24            | 410            | LDPE     | 1.538                   | .053                             | 6                | 3,300                | 25.99                     | 25                       |
| 10-1934         | 24            | 410            | LDPE     | .992                    | .053                             | 6                | 4,200                | 28.13                     | 25                       |
|                 |               |                |          |                         |                                  |                  |                      |                           |                          |
| VALVE SEA       | L SNIP TIP    |                |          |                         |                                  |                  |                      |                           |                          |
| 10-1744         | 20            | 410            | LDPE     | .721                    | .033                             | 6                | 5,600                | 27                        | 25                       |
|                 |               |                |          |                         |                                  |                  |                      |                           |                          |

### **COVER CAPS**

Designed with consumer convenience in mind, our easy on and off cover caps enhance your product's appearance on the shelf. With cover sizes 33 mm and 53 mm, MRP Solutions cover caps offer select options in LDPE or PP for a variety

Ideal markets: Personal care, homecare and automotive



| MFG.<br>ITEM ID | SIZE<br>(MM) | MATERIAL | EXTERIOR SKIRT<br>FINISH | MFG.<br>LOCATION | PIECES<br>PER CARTON | Carton<br>Weight (LBS) | CARTONS<br>PER PALLET |
|-----------------|--------------|----------|--------------------------|------------------|----------------------|------------------------|-----------------------|
| COVER CAPS      |              |          |                          |                  |                      |                        |                       |
| 10-1010         | N/A          | LDPE     | Peg Seal, HT: .614       | G                | 44,000               | 28.62                  | 25                    |
| 10-1011         | N/A          | LDPE     | Peg Seal, HT: 1.0        | •                | 21,000               | 22.82                  | 25                    |
| 10-1018         | 33           | PP       | Cover Cap                | G                | 1,200                | 10.13                  | 25                    |
| 10-1023         | 53           | PP       | Cover Cap                | 6                | 450                  | 4                      | 25                    |



### **JARS & VIALS**

With sizes as small as 1/4 ounce and as large as 40 ounces in a variety of styles and materials, MRP Solutions has a jar to meet virtually any need. Choose from our selection of Polypropylene and Polystyrene jars that can easily and efficiently be decorated to enhance your brand on the shelf. All jars and vials are produced in our Plattsburg manufacturing facility.

Ideal markets: Food, personal care, OTC pharmaceutical, industrial, homecare and much more

Material: Polypropylene, Polystyrene (\*)



| MFG.<br>ITEM ID | CAPACITY<br>(OZ) | NECK SIZE<br>(MM) | DIAMETER | HEIGHT | Capacity<br>Fill (CC) | UNIT<br>WEIGHT (GR) | PIECES<br>PER CASE | CASE<br>WEIGHT (LBS) | CARTONS<br>PER PALLET |
|-----------------|------------------|-------------------|----------|--------|-----------------------|---------------------|--------------------|----------------------|-----------------------|
| DOUBLE WA       | LL ROUND: P      | P INNER/PP        | OUTER    |        |                       |                     |                    |                      |                       |
| 016053DR        | 1                | 53                | 2.18     | 1.61   | 55                    | 16.30               | 486                | 20.40                | 35                    |
| 032058DR        | 2                | 58                | 2.30     | 1.92   | 80                    | 20.41               | 384                | 1 <i>7</i> .90       | 35                    |
| 064070DR        | 4                | 70                | 2.81     | 2.40   | 150                   | 33.90               | 198                | 17.30                | 35                    |
| 096070DR        | 6                | 70                | 2.83     | 3.03   | 215                   | 41                  | 165                | 16.90                | 35                    |
| 128089DR        | 8                | 89                | 3.66     | 2.66   | 290                   | 48.63               | 100                | 13.44                | 35                    |



| MFG.<br>ITEM ID | CAPACITY<br>(OZ) | NECK SIZE<br>(MM) | DIAMETER | HEIGHT | Capacity<br>Fill (CC) | UNIT<br>WEIGHT (GR) | PIECES<br>PER CASE | CASE<br>WEIGHT (LBS) | CARTONS<br>PER PALLET |
|-----------------|------------------|-------------------|----------|--------|-----------------------|---------------------|--------------------|----------------------|-----------------------|
| DOUBLE WA       | LL SQUARE: F     | PP INNER/PP       | OUTER    |        |                       |                     |                    |                      |                       |
| 016053DS        | 1                | 53                | 2.16     | 1.61   | 55                    | 1 <i>7</i> .10      | 486                | 21.30                | 35                    |
| 032058DS        | 2                | 58                | 2.30     | 1.93   | 80                    | 20.78               | 384                | 18.90                | 35                    |
| 064070DS        | 4                | 70                | 2.81     | 2.42   | 150                   | 34.60               | 198                | 1 <i>7</i> .60       | 35                    |
| 096070DS        | 6                | 70                | 2.83     | 3.04   | 215                   | 42.10               | 165                | 1 <i>7</i> .80       | 35                    |
| 128089DS        | 8                | 89                | 3.66     | 2.66   | 290                   | 48.30               | 100                | 13.74                | 35                    |



| MFG.<br>ITEM ID | CAPACITY<br>(OZ) | NECK SIZE<br>(MM) | DIAMETER | HEIGHT | CAPACITY<br>FILL (CC) | UNIT<br>WEIGHT (GR) | PIECES<br>PER CASE | CASE<br>WEIGHT (LBS) | CARTONS<br>PER PALLET |
|-----------------|------------------|-------------------|----------|--------|-----------------------|---------------------|--------------------|----------------------|-----------------------|
| REGULAR WALL    | . STRAIGHT SI    | IDE               |          |        |                       |                     |                    |                      |                       |
| 004033RS        | 1/4              | 33                | 1.26     | 1.18   | 15                    | 4.50                | 1,650              | 19.10                | 42                    |
| 004033RS*       | 1/4              | 33                | 1.26     | 1.18   | 15                    | 5.20                | 1,650              | 22.50                | 42                    |
| 008043RS        | 1/2              | 43                | 1.64     | 1.08   | 26                    | 4.70                | 1,664              | 21.80                | 28                    |
| 008043RS*       | 1/2              | 43                | 1.64     | 1.08   | 26                    | 5.50                | 1,664              | 25.20                | 28                    |
| 012033RS        | 3/4              | 33                | 1.23     | 1.99   | 26                    | 6.63                | 1,116              | 18.90                | 42                    |
| 012033RS*       | 3/4              | 33                | 1.25     | 2.00   | 27                    | 7.40                | 1,116              | 21                   | 42                    |
| 016043RS        | 1                | 43                | 1.66     | 1.59   | 40                    | 7.30                | 644                | 13.30                | 42                    |
| 016043RS*       | 1                | 43                | 1.64     | 1.61   | 40                    | 8.80                | 644                | 15.30                | 42                    |
| 020038LR        | 1-1/4            | 38                | 1.46     | 2.13   | 41                    | 8.90                | 1,001              | 23.20                | 35                    |
| 020038LR*       | 1-1/4            | 38                | 1.46     | 2.14   | 42.10                 | 10.55               | 1,001              | 25.70                | 35                    |
| 024048LR        | 1-1/2            | 48                | 1.85     | 1.85   | 63.50                 | 10.50               | 640                | 18.90                | 35                    |
| 032053RS        | 2                | 53                | 2.05     | 1.78   | 75                    | 10                  | 441                | 11.40                | 40                    |
| 032053RS*       | 2                | 53                | 2.04     | 1.80   | 75                    | 11.50               | 441                | 12.70                | 40                    |
| 032058RS        | 2                | 58                | 2.21     | 1.89   | 91                    | 11.10               | 324                | 10.60                | 42                    |
| 032058RS*       | 2                | 58                | 2.20     | 1.90   | 91                    | 12.60               | 324                | 11                   | 42                    |
| 048048LR        | 3                | 48                | 1.85     | 2.94   | 101                   | 11.50               | 400                | 12.40                | 38                    |
| 048058LR        | 3                | 58                | 2.21     | 2.04   | 100                   | 17.08               | 324                | 14.50                | 42                    |
| 064058RS        | 4                | 58                | 2.20     | 2.68   | 130                   | 16.30               | 324                | 13                   | 28                    |
| 064058RS*       | 4                | 58                | 2.21     | 2.70   | 130                   | 19.20               | 324                | 14.80                | 28                    |
| 064070RS        | 4                | 70                | 2.71     | 2.30   | 176                   | 24                  | 1 <i>7</i> 5       | 10                   | 42                    |
| 064070RS*       | 4                | 70                | 2.71     | 2.31   | 176                   | 24                  | 1 <i>7</i> 5       | 10.70                | 42                    |
| 064089RS        | 4                | 89                | 3.49     | 1.74   | 215                   | 24.60               | 180                | 14.20                | 35                    |
| 064089RS*       | 4                | 89                | 3.49     | 1.75   | 220                   | 24.60               | 180                | 15.20                | 35                    |
| 064089LR        | 4                | 89                | 3.50     | 1.49   | 191.80                | 24.30               | 200                | 14.60                | 35                    |
| 096070RS        | 6                | 70                | 2.71     | 2.73   | 205                   | 21                  | 210                | 13.20                | 28                    |
| 096070RS*       | 6                | 70                | 2.71     | 2.75   | 205                   | 26.15               | 210                | 15.10                | 28                    |
| 112070LR        | 7                | 70                | 2.72     | 3.04   | 230                   | 26.95               | 175                | 13.40                | 35                    |
| 128070RS        | 8                | 70                | 2.71     | 3.48   | 260                   | 27.50               | 175                | 13.80                | 28                    |
| 128070RS*       | 8                | 70                | 2.71     | 3.50   | 260                   | 35.90               | 175                | 15.80                | 28                    |
| 128089RS        | 8                | 89                | 3.49     | 2.52   | 310                   | 35                  | 120                | 12.90                | 35                    |
| 128089RS*       | 8                | 89                | 3.49     | 2.54   | 320                   | 38                  | 120                | 13.90                | 35                    |
| 192089RS        | 12               | 89                | 3.49     | 3.16   | 415                   | 36.70               | 1 <i>7</i> 5       | 1 <i>7</i> .20       | 20                    |
| 192089RS*       | 12               | 89                | 3.49     | 3.20   | 415                   | 44                  | 100                | 13.90                | 28                    |
| 256089RS*       | 16               | 89                | 3.49     | 3.90   | 485                   | 51                  | 80                 | 12                   | 35                    |
| 256089LR        | 16               | 89                | 3.49     | 3.87   | 485                   | 35.60               | 140                | 13.33                | 20                    |
| 288089LR        | 18               | 89                | 3.49     | 4.22   | 547.70                | 56.60               | 80                 | 14.70                | 28                    |

<sup>\*</sup>Polystyrene

### JARS & VIALS (continued)









Regular Wall Tapered Side

Specialty – Beaded Vial

Specialty – Threaded Vial

Specialty – Jewelry Basket

| MFG.<br>ITEM ID            | CAPACITY<br>(OZ) | NECK SIZE<br>(MM) | DIAMETER | HEIGHT | Capacity<br>Fill (CC) | UNIT<br>WEIGHT (GR) | PIECES<br>PER CASE | CASE<br>WEIGHT (LBS) | CARTONS<br>PER PALLET |  |
|----------------------------|------------------|-------------------|----------|--------|-----------------------|---------------------|--------------------|----------------------|-----------------------|--|
| REGULAR WALL STRAIGHT SIDE |                  |                   |          |        |                       |                     |                    |                      |                       |  |
| 384120RS                   | 24               | 120               | 4.70     | 3.08   | 735                   | 59                  | 55                 | 10.10                | 35                    |  |
| 384120RS*                  | 24               | 120               | 4.71     | 3.10   | <i>7</i> 35           | 66                  | 55                 | 11                   | 35                    |  |
| 512120RS                   | 32               | 120               | 4.70     | 3.82   | 907                   | 68.50               | 44                 | 9.6                  | 35                    |  |
| 512120RS*                  | 32               | 120               | 4.71     | 3.84   | 907                   | 77.68               | 44                 | 10.30                | 35                    |  |
| 640120RS                   | 40               | 120               | 4.70     | 5.12   | 1364                  | 96.18               | 36                 | 10                   | 35                    |  |

| MFG.<br>ITEM ID | CAPACITY<br>(OZ) | NECK SIZE<br>(MM) | DIAMETER | HEIGHT | Capacity<br>Fill (CC) | UNIT<br>WEIGHT (GR) | PIECES<br>PER CASE | CASE<br>WEIGHT (LBS) | CARTONS<br>PER PALLET |
|-----------------|------------------|-------------------|----------|--------|-----------------------|---------------------|--------------------|----------------------|-----------------------|
| REGULAR W       | ALL TAPERED      | SIDE              |          |        |                       |                     |                    |                      |                       |
| 064070RT        | 4                | 70                | 2.71     | 2.13   | 176                   | 15                  | 204                | 9.10                 | 42                    |
| 128083RT        | 8                | 83                | 3.24     | 2.78   | 290                   | 26                  | 144                | 10.60                | 28                    |

| MFG.<br>ITEM ID | CAPACITY<br>(OZ) | NECK SIZE<br>(MM) | DIAMETER | HEIGHT | Capacity<br>Fill (CC) | UNIT<br>WEIGHT (GR) | PIECES<br>PER CASE | CASE<br>WEIGHT (LBS) | CARTONS<br>PER PALLET |
|-----------------|------------------|-------------------|----------|--------|-----------------------|---------------------|--------------------|----------------------|-----------------------|
| BEADED VIA      | L                |                   |          |        |                       |                     |                    |                      |                       |
| 32X200V2        | 1-1/4 X 2        | 38                | 1.25     | 3.00   | 63.50                 | 12.25               | 1,043              | 23                   | 28                    |
|                 |                  |                   |          |        |                       |                     |                    |                      |                       |
| SPECIALTY -     | THREADED VI      | AL                |          |        |                       |                     |                    |                      |                       |
| 605300VT        | 60 dram          | 53                | 1.92     | 4.42   | 221                   | 22.70               | 268                | 18                   | 28                    |

| MFG.<br>ITEM ID            | CAPACITY<br>(OZ) | PIECES<br>PER CASE | CASE<br>WEIGHT (LBS) | CARTONS<br>PER PALLET |
|----------------------------|------------------|--------------------|----------------------|-----------------------|
| SPECIALTY - JEWELRY BASKET |                  |                    |                      |                       |
| JB1281AD                   | 8                | 800                | 12                   | 35                    |

<sup>\*</sup>Polystyrene



Thick Wall, Straight Side

| MFG.<br>ITEM ID | CAPACITY<br>(OZ) | NECK SIZE<br>(MM) | DIAMETER | HEIGHT | Capacity<br>Fill (CC) | UNIT<br>WEIGHT (GR) | PIECES<br>PER CASE | CASE<br>WEIGHT (LBS) | CARTONS<br>PER PALLET |
|-----------------|------------------|-------------------|----------|--------|-----------------------|---------------------|--------------------|----------------------|-----------------------|
| THICK WALL      | STRAIGHT SI      | DE                |          |        |                       |                     |                    |                      |                       |
| 002033TS        | 1/8              | 33                | 1.30     | 0.97   | 9                     | 8                   | 1,820              | 33.10                | 28                    |
| 002033TS*       | 1/8              | 33                | 1.30     | 0.97   | 9                     | 8.70                | 1,820              | 39.50                | 28                    |
| 004033TS        | 1/4              | 33                | 1.33     | 1.17   | 15                    | 9                   | 1,638              | 39.60                | 28                    |
| 008043TS        | 1/2              | 43                | 1.72     | 1.08   | 26                    | 10.60               | 968                | 26.20                | 28                    |
| 008043TS*       | 1/2              | 43                | 1.74     | 1.09   | 26                    | 12.80               | 968                | 32                   | 28                    |
| 016043TS        | 1                | 43                | 1.74     | 1.60   | 40                    | 15.30               | 616                | 24.10                | 42                    |
| 016043TS*       | 1                | 43                | 1.71     | 1.61   | 40                    | 18.50               | 616                | 28.70                | 42                    |
| 032053TS        | 2                | 53                | 2.10     | 1.78   | 75                    | 21                  | 378                | 20.50                | 42                    |
| 032053TS*       | 2                | 53                | 2.13     | 1.80   | <i>7</i> 5            | 26                  | 280                | 20.90                | 42                    |
| 032058TS        | 2                | 58                | 2.24     | 1.88   | 95                    | 24.20               | 288                | 1 <i>7</i> .80       | 42                    |
| 032058TS*       | 2                | 58                | 2.27     | 1.90   | 95                    | 29                  | 240                | 1 <i>7</i> .60       | 42                    |
| 032070TS        | 2                | 70                | 2.85     | 1.27   | 88                    | 26.80               | 360                | 26.70                | 42                    |
| 064070TS        | 4                | <i>7</i> 0        | 2.71     | 2.28   | 175                   | 43                  | 165                | 18.20                | 42                    |
| 064070TS*       | 4                | 70                | 2.75     | 2.31   | 170                   | 53                  | 140                | 19.30                | 42                    |
| 096070TS        | 6                | 70                | 2.72     | 2.73   | 205                   | 50                  | 198                | 24.70                | 28                    |
| 096070TS*       | 6                | 70                | 2.75     | 2.76   | 205                   | 60                  | 168                | 24.70                | 28                    |
| 128070TS        | 8                | <i>7</i> 0        | 2.72     | 3.47   | 260                   | 63                  | 170                | 27.50                | 28                    |
| 128070TS*       | 8                | 70                | 2.72     | 3.51   | 260                   | 78                  | 140                | 26.30                | 28                    |
| 128089TS        | 8                | 89                | 3.57     | 2.50   | 318                   | 64                  | 120                | 20                   | 35                    |
| 128089TS*       | 8                | 89                | 3.53     | 2.55   | 325                   | <i>7</i> 6          | 90                 | 19. <i>7</i> 0       | 35                    |
| 192089TS        | 12               | 89                | 3.49     | 3.17   | 400                   | 81                  | 100                | 21.50                | 28                    |
| 192089TS*       | 12               | 89                | 3.53     | 3.20   | 400                   | 97.50               | <i>7</i> 5         | 21                   | 28                    |
| 256089TS        | 16               | 89                | 3.49     | 3.85   | 485                   | 96                  | 80                 | 20.20                | 35                    |
| 256089TS*       | 16               | 89                | 3.53     | 3.89   | 485                   | 115                 | 60                 | 19.10                | 35                    |
| THICK WALL      | STRAIGHT SI      | DE ROUND BO       | ттом     |        |                       |                     |                    |                      |                       |
| 004033TR*       | 1/4              | 33                | 1.38     | 1.19   | 15                    | 10.70               | 1,638              | 41.90                | 28                    |
| 008043TR*       | 1/2              | 43                | 1.74     | 1.08   | 26                    | 12                  | 1,520              | 43.80                | 28                    |
| 012043TR*       | 3/4              | 43                | 1.76     | 1.30   | 32                    | 15                  | 1,140              | 41.10                | 35                    |
| 016043TR*       | 1                | 43                | 1.71     | 1.61   | 40                    | 1 <i>7</i> .80      | 1,045              | 47.30                | 28                    |

<sup>\*</sup>Polystyrene



### **LINERS**

Liners are an important part of a complete package and assure that a container's contents are secure. Whether you need a liner for freshness and protection, to prevent leaks, allow product venting, or to provide tamper evidence, our complete selection of liners will meet your packaging needs. From foods and pharmaceuticals to cosmetics and chemical, we can meet any industry requirement. Listed below are our stock and standard liners. Additional options available. Please call for more information.

#### **FUNCTION**

WS - Welded Seal

CP - Clean Peel

TR - Traditional/Gasket

EE – Easy Entry

HB – High Barrier

PRS - Pressure Sensitive

#### **CONTAINER MATERIALS**

PVC – Polyvinyl Chloride

PET - Polyester

PP – Polypropylene

PS – Polystyrene

PE - Polyethylene

UV – Universal

GL – Glass

#### **IMPRINT**

SFF – Sealed for Freshness

SFYP - Sealed for Your Protection

LNP - Lift-N-Peel

QS – Quality Seal

R - Red

B – Black

W - White

G - Green



Pull Tab





Lift-N-Peel

Tri-Tab





Vented Liner

Round Cut

| DESCRIPTION       | FUNCTION | CONTAINER<br>MATERIAL | IMPRINT               | BACKING<br>THICKNESS | NUMBER OF<br>PIECES | MFG.     |
|-------------------|----------|-----------------------|-----------------------|----------------------|---------------------|----------|
| PLATTSBURGH       |          |                       |                       |                      |                     |          |
| TS-I              | TR       | UV                    | PLAIN                 | .020                 | 1                   | TECHSEAL |
| ESTERFOIL 50      | TR       | UV                    | PLAIN                 | .020                 | 1                   | SELIG    |
| F217              | TR       | UV                    | PLAIN                 | .020/.035/.050       | 1                   | TRI-SEAL |
| F217 EMBOSSED     | TR       | UV                    | PLAIN                 | .035                 | 1                   | TRI-SEAL |
| F217 NYLON BONDED | TR       | UV                    | PLAIN                 | .040                 | 1                   | TRI-SEAL |
| F828              | TR       | UV                    | PLAIN                 | .020/.035            | 1                   | TRI-SEAL |
| FS1-15            | CP, HB   | PE, PP                | PLAIN                 | .030                 | 2                   | SELIG    |
| FS1-15/C1S        | CP, HB   | PE, PP                | R SFYP                | .008                 | 1                   | SELIG    |
| FS1-15/S70A       | CP, HB   | PE, PP                | R SFYP                | .007                 | 1                   | SELIG    |
| FS3-19            | СР       | PET, PVC              | PLAIN, B SFYP         | .020                 | 2                   | SELIG    |
| FS3-19/C25P       | СР       | PET, PVC              | PLAIN                 | .035                 | 2                   | SELIG    |
| FS3-19/S105       | CP       | PET, PVC              | PLAIN                 | .010                 | 1                   | SELIG    |
| FS5-4             | WS       | UV                    | PLAIN, B SFYP, R SFYP | .006/.020            | 1                   | SELIG    |
| FS5-4/C1S         | WS       | UV                    | R SFYP                | .008                 | 1                   | SELIG    |
| FS5-8             | WS       | UV                    | R SFYP                | .020                 | 1                   | SELIG    |
| FS7-12            | CP, HB   | GL, PE                | B SFYP                | .020                 | 2                   | SELIG    |
| FSM-1             | WS       | PE                    | PLAIN, B SFYP         | .020                 | 2                   | SELIG    |
|                   |          |                       |                       |                      |                     |          |

### LINERS (continued)

| DESCRIPTION  | FUNCTION | Container<br>Material       | IMPRINT                           | BACKING<br>THICKNESS | NUMBER OF<br>PIECES | MFG.                                    |
|--|----------|-----------------------------|-----------------------------------|----------------------|---------------------|---|
| HS035  | WS       | UV                          | PLAIN, R SFYP,<br>B & R BILINGUAL | .020                 | 1                   | SANCAP                                  |
| HS035  | CP       | UV                          | R SFYP                            | .008                 | 1                   | SANCAP                                  |
| HS035  | WS       | UV                          | R SFYP                            | .025                 | 2                   | SANCAP                                  |
| HS035N/20LD  | WS       | UV                          | R SFYP                            | .020                 | 1                   | SANCAP                                  |
| HS123  | WS, EE   | PE                          | W & B SFYP                        | .020                 | 2                   | TEKNI-PLEX                              |
| HS128  | WS, EE   | PP                          | W SFYP                            | .020                 | 2                   | TEKNI-PLEX                              |
| HS130  | WS       | PE                          | PLAIN, B SFYP                     | .020                 | 2                   | TEKNI-PLEX                              |
| HS205  | WS       | UV                          | R SFYP                            | .020                 | 1                   | TEKNI-PLEX                              |
| HSL5-6   | СР       | UV                          | R SFYP                            | .020                 | 2                   | TECHSEAL                                |
| HSS-5.6/20   | WS       | GL, PE, PP, PS,<br>PET, PVC | R SFYP                            | .020                 | 1                   | TECHSEAL                                |
| ISPE BA003   | WS       | PE                          | PLAIN                             | U-10/.013            | 1                   | SELIG CANADA                            |
| ISPE/PP BA015  | CP, HB   | PE, PP                      | B SFYP, PLAIN                     | U-5/.008             | 1                   | SELIG CANADA                            |
| ISPP BA215   | WS, HB   | PP                          | PLAIN                             | U-10/.013            | 1                   | SELIG CANADA                            |
| ISPVC/PET  | WS       | PET, PVC                    | PLAIN                             | U-10/.013            | 1                   | SELIG CANADA                            |
| MRPLN04  | WS       | UV                          | R SFYP                            | .020                 | 1                   | MRP                                     |
| PE FOAM  | TR       | UV                          | PLAIN                             | .035                 | 1                   | TRI-SEAL                                |
| PHARM SEAL V   | TR       | UV                          | PLAIN                             | .020                 | 1                   | TECHSEAL                                |
| PLAIN PULP   | TR       | UV                          | PLAIN                             | .020                 | 1                   | TECHSEAL                                |
| PRESSURE SEAL/20                                     | PRS      | UV                          | PLAIN, B SFYP                     | .020                 | 1                   | SANCAP                                  |
| PS113  | PRS      | UV                          | PLAIN, B SFYP                     | .020                 | 1                   | SELIG CANADA                            |
| PVLF   | TR       | UV                          | PLAIN                             | .020                 | 1                   | TEKNI-PLEX                              |
| SG75   | WS       | PE                          | PLAIN, W SFYP                     | .020/.035            | 2                   | SELIG CANADA                            |
| SG90   | СР       | PET, PVC                    | PLAIN, W SFYP                     | .020                 | 2                   | SELIG CANADA                            |
| TEFLON   | TR       | UV                          | PLAIN                             | .040                 | 1                   | SAINT-GOBAIN<br>PERFORMANCE<br>PRODUCTS |
| TRI-FOIL   | TR       | UV                          | PLAIN                             | .035                 | 1                   | TRI-SEAL                                |
| TRI-GUARD TSPE                                       | WS, HB   | PE                          | PLAIN                             | .035                 | 2                   | TRI-SEAL                                |
| TRI-GUARD TSPP                                       | WS, HB   | PP                          | PLAIN                             | .035                 | 2                   | TRI-SEAL                                |
| TS VIII  | TR       | UV                          | PLAIN                             | .020                 | 1                   | TECHSEAL                                |
| TWINSBURG  |          |                             |                                   |                      |                     |   |
| .020 MANILA PULP WAX COATED UNPRINTED 3-7/16"        | TR       | UV                          | PLAIN                             | .020                 | 1                   | SELIG                                   |
| .020C25/FSM-1 SFYP 4-3/16"                           | PE       | PE                          | SFYP                              | .020                 | 1                   | SELIG                                   |
| .040 FOAM POLYSTYRENE ENG SFF<br>BLACK PRINT 4-3/16" | PS       | PS                          | SFF                               | .040                 | 1                   | SELIG                                   |
| F-217 .040 FOAM UNPRINTED 4-7/8"                     | TR       | UV                          | PLAIN                             | .040                 | 1                   | SELIG                                   |
| F-217 .025 FOAM UNPRINTED 3"                         | TR       | UV                          | PLAIN                             | .025                 | 1                   | SELIG                                   |
| FS1-13 .008 C1S/.002R1                               | СР       | PE, PP                      | SFF                               | .008                 | 1                   | SELIG                                   |
| FS1-13 S70A FOAM                                     | СР       | PE, PP                      | PLAIN                             | .007                 | 1                   | SELIG                                   |
| FS1-16 .008 C1S/.002R1                               | СР       | PE, PP                      | PLAIN                             | .008                 | 1                   | SELIG                                   |

### LINERS (continued)

| DESCRIPTION                  | FUNCTION | CONTAINER<br>MATERIAL   | IMPRINT          | BACKING<br>THICKNESS | NUMBER OF<br>PIECES | MFG.      |
|------------------------------|----------|-------------------------|------------------|----------------------|---------------------|-----------|
| FS3-19 .020 C25 FOAM         | СР       | PET, PVC                | SFF              | .020                 | 1                   | SELIG     |
| FS3-19 S70                   | СР       | PET, PVC                | SFF              | .007                 | 1                   | SELIG     |
| FS3-25 S70 FOAM              | СР       | PET, PVC                | SFF              | .007                 | 1                   | SELIG     |
| FS3-27 S70 FOAM              | CP       | PET, PVC                | PLAIN            | .007                 | 1                   | SELIG     |
| FS5-10 .008 C1S/.002R1       | СР       | PE, PET, PVC, PP,<br>GL | SFYP             | .008                 | 1                   | SELIG     |
| FS5-4 .008 C1S               | TE       | UV                      | SFF              | .008                 | 1                   | SELIG     |
| FS5-4 .020 C25 FOAM          | TE       | UV                      | SFF              | .020                 | 1                   | SELIG     |
| FS5-8 .020 PS FOAM           | TE       | UV                      | SFYP             | .020                 | 1                   | SELIG     |
| FS5-9 .008 C1S/.002R1        | СР       | UV                      | SFF              | .008                 | 1                   | SELIG     |
| FS5-9 S105 FOAM              | СР       | UV                      | PLAIN            | .0105                | 1                   | SELIG     |
| FSM-1 .008 C1S/.002R1        | TE       | PE                      | SFYP             | .008                 | 1                   | SELIG     |
| FSM-4 .008 C1S/.002R1        | TE       | PP                      | SFF              | .008                 | 1                   | SELIG     |
| HS .020 VENTED               | СР       | UV                      | SFF              | .020                 | 1                   | SELIG     |
| HS O35/.020R                 | СР       | UV                      | SFYP             | .020                 | 1                   | SELIG     |
| HS5-6 .020 FOAM              | СР       | UV                      | SFYP             | .020                 | 1                   | SELIG     |
| HSL-3 .040 FOAM              | СР       | UV                      | PLAIN            | .040                 | 1                   | SELIG     |
| LP127E LIFT-N-PEEL           | СР       | PE, PP                  | LNP              | .007                 | 1                   | SELIG     |
| LP170H LIFT-N-PEEL           | СР       | PE, PVC, PET, GL        | LNP              | .007                 | 1                   | SELIG     |
| LP283T LIFT-N-PEEL           | СР       | PVC, PET                | LNP              | .007                 | 1                   | SELIG     |
| LP358M LIFT-N-PEEL           | СР       | UV                      | LNP              | .013                 | 1                   | SELIG     |
| PS113 .020 FOAM M0475        | PRS      | UV                      | PLAIN            | .020                 | 1                   | SELIG     |
| PS-F1 MO461                  | PRS      | UV                      | SFF              | .020                 | 1                   | SELIG     |
| SOMERSET                     |          |                         |                  |                      |                     |           |
| LIFT-N-PEEL E-U5             | СР       | PE, PP                  | LNP              | .007                 | 1                   | SELIG     |
| FOILSEAL ISCT-U5             | СР       | PVC, PET                | PLAIN            | .0045                | 1                   | SELIG     |
| FOILSEAL ISPE, PP-U5         | СР       | PE, PP                  | PLAIN            | .0045                | 1                   | SELIG     |
| FOILSEAL ISPVC/PET-U5        | WS       | PVC, PET                | PLAIN            | .0045                | 1                   | SELIG     |
| FOILSEAL S70A/FS1-13         | СР       | PE, PP                  | PLAIN, SFF       | .007                 | 1                   | SELIG     |
| FOILSEAL S70A/FS1-15         | СР       | PE, PP                  | PLAIN, SFYP      | .007                 | 1                   | SELIG     |
| FOILSEAL S70A/FS3-19         | СР       | PET, PVC                | PLAIN, SFF       | .007                 | 1                   | SELIG     |
| FOILSEAL S70A/FS5-9          | СР       | UV                      | PLAIN, SFF, SFYP | .007                 | 1                   | SELIG     |
| FOILSEAL TSPET/1             | СР       | PET, PVC                | PLAIN            | N/A                  | 1                   | TRI-SEAL  |
| HSS-5.6/020                  | WS       | UV                      | SFYP             | .020                 | 1                   | TECH-SEAL |
| LIFT-N-PEEL E-U10            | СР       | PE, PET                 | LNP              | .010                 | 1                   | SELIG     |
| LIFT-N-PEEL E-U5             | СР       | PE, PP                  | LNP              | .007                 | 1                   | SELIG     |
| LIFT-N-PEEL M-U5             | TE       | UV                      | LNP              | .013                 | 1                   | SELIG     |
| LIFT-N-PEEL T-U5             | СР       | PVC, PET                | LNP              | .007                 | 1                   | SELIG     |
| PRESSURE SENSITIVE PS22      | PRS      | UV                      | PLAIN, SFYP      | .020                 | 1                   | TRI-SEAL  |
| PRESSURE SENSITIVE TSPS10-1F | PRS      | UV                      | PLAIN            | N/A                  | 1                   | TRI-SEAL  |



### **IN-HOUSE COLORS**

We mold the rainbow. Whether you're using color to define a brand, or to brand within a brand, it's a great way to achieve a unique look that stands out on the shelf. MRP Solutions keeps a variety of standard pigments in house.

Don't see what you need? We can also match any specified color to support your brand. Color availability varies by manufacturing location.

| SWATCH | COLOR          | MATERIAL | MRP SOLUTIONS# | PANTONE #     | FACILITY   |
|--------|----------------|----------|----------------|---------------|------------|
|        | White          | PP       | MRPWH01   012W | White         | <b>P S</b> |
|        | Pearl White    | PP       | MPRWH04        | Pearl*        | •          |
|        | Blue/White     | PP       | MRPSH05        | Cool Gray 1   | •          |
|        | Yellow         | PP       | MRPYEO1        | 121           | 0          |
|        | Yellow         | PP       | MRPYE02   271Y | 108           | <b>P S</b> |
|        | Yellow         | PP       | MRPYE03   3204 | 116           | <b>P S</b> |
|        | Yellow         | PP       | MRPYE04   262Y | <i>7</i> 408  | <b>9 S</b> |
|        | Yellow         | PP       | 263Y           | 2002          | 6          |
|        | Gold           | PP       | MRPGD01        | 871**         | •          |
|        | Gold           | PP       | MRPGD02   246Y | 872**         | <b>9 S</b> |
|        | Orange         | PP       | MRPOR01   1080 | 151           | <b>9 S</b> |
|        | Orange         | PP       | MRPOR02   1290 | 166           | <b>9 S</b> |
|        | Tr. Orange     | PP       | 0950           | 021***        | 6          |
|        | Tr. Orange     | PP       | MRPOR03        | 1495***       | •          |
|        | Red            | PP       | MRPRD01        | 1 <i>7</i> 95 | •          |
|        | Red            | LDPE     | 1 <i>57</i> R  | 186           | 6          |
|        | Red            | PP       | MRPRD02 250R   | 186           | <b>9 S</b> |
|        | Red            | PP       | 182R           | 200           | •          |
|        | Red            | PP       | MRPRD03        | 1805          | •          |
|        | Purple (pearl) | PP       | MRPPU01        | 272*          | •          |
|        | Purple         | PP       | MRPPU02        | 2587          | •          |
|        | Purple         | PP       | MPRPU03        | 520           | •          |
|        | Purple         | PP       | 163V           | 2073          | 6          |
|        | Purple         | PP       | 162V           | 2607          | 6          |
|        | Pink           | PP       | MPRPKO1        | 240           | •          |
|        | Pink           | PP       | 180P           | 218           | 6          |
|        | Blue (Aqua)    | PP       | 298B           | 2397          | 6          |
|        | Аqиа           | PP       | MPRAQ01        | 632           | •          |
|        | Blue           | PP       | 330B           | 299           | 6          |
|        | Blue/White     | PP       | MRPBU01        | 640           | •          |
|        | Tr. Blue       | PP       | MRPBU02        | 2935***       | •          |
|        | Blue           | PP       | MRPBU03        | 286           | •          |
|        | Blue           | PP       | MRPBU04        | 2945          | •          |
|        | Blue           | PP       | MRPBU05        | 541           | •          |
|        | Blue           | PP       | MRPBU06        | 281           | •          |

| SWATCH | COLOR       | MATERIAL | MRP#               | PANTONE #     | FACILITY   |
|--------|-------------|----------|--------------------|---------------|------------|
|        | Blue        | PP       | MRPBU07            | 2755          | 0          |
|        | Green       | PP       | MRPGN01   254G     | 361           | <b>9 S</b> |
|        | Green       | PP       | MRPGN02            | 348           | 0          |
|        | Green       | PP       | MRPGN03            | 335           | 0          |
|        | Green       | PP       | MRPGN04            | 561           | 0          |
|        | Green       | PP       | MRPGN05   372G     | 3308          | <b>9 S</b> |
|        | Brown       | PP       | 148N               | 1545          | 6          |
|        | Black       | PP       | MRPBK01            | Black         | 0          |
|        | Tan/Beige   | PP       | MRPTN01            | 4545          | 0          |
|        | Brown       | PP       | MRPBRO 1           | 469           | 0          |
|        | Brown       | PP       | MRPBRO2   173N     | 412           | <b>9 S</b> |
|        | Gray        | PP       | MRPGY01            | 427           | 0          |
|        | Gray        | PP       | MRPGY02   116F     | 429           | <b>P S</b> |
|        | Silver      | LDPE     | MRPSV01   135F     | 877**         | <b>P S</b> |
|        | White PE    | LDPE     | MRPWH03   021W     | White         | <b>P S</b> |
|        | Yellow      | LDPE     | MRPYEO5            | 107           | 0          |
|        | Blue        | LDPE     | MRPBU08            | 286           | 0          |
|        | Green       | LDPE     | MRPGN06            | 348           | 0          |
|        | Green       | LDPE     | MRPGN07            | 3308          | 0          |
|        | Black       | LDPE     | MRPBK02   001K     | Black         | <b>9 S</b> |
|        | Silver      | LDPE     | MRPSV02   135F     | 877**         | <b>9 S</b> |
|        | Yellow      | PE       | 107Y               | 106           | 6          |
|        | Orange      | PE       | 0700               | 021           | 6          |
|        | Blue        | PE       | 126B               | 2756          | 6          |
|        | White PS    | PS       | MRPWH02   021W     | White         | <b>P S</b> |
|        | White       | PP       | 7620               | White         | Ū          |
|        | Black       | PP       | 7566   7037   018K | Black 2C      | 0 6        |
|        | Red         | PP       | 7781               | 186C          | 0          |
|        | Green       | PP       | 7786   348G        | 348C          | 0 6        |
|        | Yellow      | PP       | 7784               | 101C          | 0          |
|        | Reflex Blue | PP       | 7785   310B        | Reflex Blue C | <b>0 6</b> |

When inquiring about these colors please reference the MRP Solutions #. Pantone #s are for reference only – not an exact

match.

\* This color is pearlescent 

\*\* This color is metallic 

\*\* This color is very transparent

## TRUSTED

Committed to your success. Every day.

There's a reason MRP Solutions has been our customers' trusted partner for decades. Actually, there are five:

**Safety** - Everything we do is driven by safety excellence.

**Integrity** – We are respectful, ethical and authentic in all our actions.

**People-First** – We welcome, collaborate with, and support others by being proactive, approachable and agile.

**Accountability** – We keep commitments we make to one another and continually challenge ourselves by achieving ambitious goals without compromising quality.

**Friendly** – We are kind, encourage positivity, and make time to connect and laugh.

#### MRP SOLUTIONS POLICIES

#### **DECORATING**

We are equipped to meet your hot stamping or offset printing requirements on our closures or jars at very competitive pricing. We reserve the right to over/under ship by 15%. Hot stamp die & artwork charges available upon receipt of approved samples.

Offset plates & artwork charges available upon receipt of approved samples.

#### **DESIGN AND MOLD BUILDING**

Our excellent machine shop has the most modern equipment and is available to meet any of your custom mold requirements or to assist in any new product development.

Our white colorant suppliers have certified that all white colorants supplied to MRP Solutions meet all FDA and USP regulation. None of our white colorants contain heavy metals. FDA status of colors is the responsibility of our customer.

PLEASE NOTE: Testing for compatibility between caps, lining materials, containers and product is the responsibility of the customer solely. The customer is responsible for any premium service charges. Sample amount subject to approval.

MRP Solutions uses only prime resins from major suppliers and all are FDA approved and have Drug Master Files with the FDA.

#### **CLOSURE LINERS**

All of our closures liners are certified as meeting all pertinent regulations.

Our single wall and PP inner PP outer double wall jars and all our unlined closures are recyclable.

#### **RETURNS**

No returns without authorization (RA) number (FO RM SA 106). Restocking charges may apply. Returns must be within (90) days of invoice date. RA's are good for (60) days. After that returns will not be accepted. Unauthorized returns will be refused at delivery. If products are returned after (60) days, a 25% restocking fee will be assessed.

#### FREIGHT CLAIMS / DAMAGED GOODS

Customer assumes full responsibility for prompt filing of freight claims for goods damaged in transit. Claims must be filed within (5) business days of the receipt of goods. We will assist as required. Claim denials due to late or delinquent filing will be the customer's sole responsibility.

#### COMPATIBILITY

Our PP resin is not recommended for petroleum distillates. Certificate of Compliance issued with every order we process.

#### **NEXT DAY AND 2ND DAY AIR SERVICES FOR STOCK PRODUCTS**

We do our best to get overnight shipments out immediately. However, things can happen beyond our control. Therefore, we will not be responsible for premium charges when a shipment goes the following day. Any orders received after 11:30 am EST will be considered next day's business.

#### WEIGHTS

All weights given are in U.S. pounds and are accurate to within  $\pm$  5%. MRP Solutions, LLC manufactures in accordance with good manufacturing process.

#### **TERMS & CONDITIONS**

For a full list of terms & conditions, please visit mrpcap.com.

### PACKAGAING WITH PURPOSE.

For more information on MRP Solutions products and services, or to view a list of authorized distributors in your region, contact us today.

### **MRP Solutions**

100 N. Field, Suite 100 Lake Forest, IL 60045

**P** 518-849-8340

1 Plant Street Plattsburgh, NY 12901

P 888-561-1669 | F 800-432-5277

2222 Highland Road Twinsburg, OH 44087

P 330-425-4206 | F 330-425-4586

17 Veronica Avenue Somerset, NJ 08873

**P** 732-873-5000 | **F** 732-301-3191



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