

**PolyOne**<sup>®</sup>

We help people work wonders  
with polymers!

RIGID VINYL PACKAGING SOLUTIONS

**PRODUCT SELECTION GUIDE**





## THE POWER OF VINYL

Geon® Vinyl Rigid Packaging Compounds have become the leading material for creative marketers of foods, beverages, personal care items, general packaged goods, oils, chemicals, waxes, flammable fluids, and aliphatic hydrocarbons.

In addition to their glass-like sparkle and clarity with UV protection, vinyl bottle compounds provide virtually limitless design capabilities while maintaining excellent impact properties.

### BENEFITS OF RIGID VINYL PACKAGING COMPOUNDS

- ▶ Vinyl is recycled every day, making it an environmentally sound choice.
- ▶ Food-grade products with years of safe use in FDA-approved food applications.
- ▶ Impact formulated to meet specific application requirements from normal to very high.
- ▶ Chemically resistant to many solvents, acids, bases, and oils.
- ▶ Transparent for clear packaging.
- ▶ Excellent melt properties utilizing low-cost tooling for creating packaging with:
  - handleware
  - large sizes for bulk products
  - wide ovals
  - unique shapes for small volume items

## THE POWER OF POLYONE®

PolyOne is North America's leading vinyl compound producer and a worldwide leader in vinyl technology. Our focus is providing solutions to your packaging challenges. Market Development Teams work closely with the entire supply chain to determine the requirements of an application. Processors can team with our highly experienced Technical Service group to help optimize their operation for vinyl. Armed with the most extensive vinyl compound product line in the industry that includes Geon® Vinyl Rigid Packaging Compounds and OxyPurge® Purging Compounds, PolyOne is poised to provide solutions to your packaging needs.

- ▶ **Multi-Purpose Compounds** – An industry standard. Many of these products have been used for years in both food-grade and nonfood-grade applications traditionally employing vinyl.
- ▶ **Specialty Compounds** – From hot-fill bottles to injection blow molded bottles, these products have been formulated to meet specific application requirements in the packaging arena.
- ▶ **Purges & Additives** – Packaging processors need more than just compound to help them run efficiently. PolyOne provides purge materials and additive concentrates for use with vinyl packaging compounds.

## GEON® MULTI-PURPOSE COMPOUNDS

| Product         | Impact   | Food-Grade* | UV Inhibitor Level | Description                                                       | Typical Applications                                                                             |
|-----------------|----------|-------------|--------------------|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| 2188GC          | High     | ●           | ----               | Glass-Clear, Low-Odor                                             | Edible oils and other taste- and odor-sensitive food products                                    |
| 2188GC-1V       | High     | ●           | Standard           | Glass-Clear, Low-Odor, UV Protection for Bottle Contents          | Toiletries, cosmetics, other light-sensitive products                                            |
| 2188GC-3V       | High     | ●           | High               | Glass-Clear, Low-Odor, UV Protection for Bottle Contents & Bottle | Toiletries, cosmetics, other light-sensitive products                                            |
| JGR 136 CL01 FG | Medium   | ●           | ----               | Glass-Clear, Good Clarity                                         | Smaller-sized bottles, sheet extrusion, thermoformed packaging                                   |
| JGR 136 CL13 FG | Medium   | ●           | ----               | Good Clarity, Slightly Blue                                       | Smaller-sized bottles for food-grade packaging applications                                      |
| 2192            | Standard | ●           | ----               | Clear                                                             | Dry food packaging                                                                               |
| 161J-1          | High     | ----        | ----               | Glass-Clear                                                       | Shampoos, detergents, disinfectants, cleaning fluids, alcohols, bleaches, and liquid floor waxes |
| 161J            | High     | ----        | ----               | Clear, Slightly Blue                                              | Shampoos, detergents, disinfectants, cleaning fluids, alcohols, bleaches, and liquid floor waxes |

## GEON® SPECIALTY COMPOUNDS

| Product            | Impact    | Food-Grade* | UV Inhibitor Level | Description                                          | Typical Applications                                                                                       |
|--------------------|-----------|-------------|--------------------|------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| 2199               | Very High | ●           | ----               | Clear, Good Low-Temperature Impact                   | Bottles requiring high bottle drop impact at low temperatures, like juices                                 |
| 1699 Natural       | Very High | ----        | ----               | Opaque, High-Gloss, Excellent Low-Temperature Impact | Auto/marine additives, charcoal lighter fluids. Reduce bottle weight without compromising impact strength. |
| 161J-A White       | High      | ----        | ----               | Opaque, White                                        | Charcoal lighter fluids, automotive fuel additives                                                         |
| 161J-4-DD          | High      | ----        | ----               | Clear, Dark Blue                                     | General-purpose packaging, color additive for bottles requiring a more blue appearance                     |
| 2188               | High      | ●           | ----               | Clear, High-Gloss                                    | Low-odor food and cosmetic bottles                                                                         |
| 2121               | High      | ●           | ----               | Clear, Blue                                          | Large bottles for both food-grade and general-purpose applications                                         |
| 4195               | High      | ●           | ----               | Clear, Hot-Fill                                      | Hot-fill applications like syrups, juices, dressings, salsas, waxes, and polishes                          |
| 2797               | Medium    | ----        | ----               | Clear, Chemical-Resistant, Low Crease Whitening      | Pine cleaners, limonene cleaners, disinfectants, detergents, alcohols, bleaches, liquid floor waxes        |
| VB 9-51            | Medium    | ●           | ----               | Transparent Amber                                    | Coffee creamer containers, suntan products                                                                 |
| XPL 189 Amber 1505 | Medium    | ●           | ----               | Transparent Amber                                    | Medicine bottles                                                                                           |
| 2710 Amber 9360    | Medium    | ●           | ----               | Transparent Amber, Injection Blow Molding            | Hair care products                                                                                         |
| 2710 Amber 9375    | Medium    | ----        | ----               | Transparent Amber, Injection Blow Molding            | Hair care products                                                                                         |
| 2710 Trans 9470    | Medium    | ●           | ----               | Clear, Injection Blow Molding                        | Small injection blow bottles, clear injection molding, cosmetics, hair care                                |
| XPL 293 Frost 1733 | Medium    | ●           | Standard           | Frost Appearance, UV Protection for Bottle Contents  | Toiletries, cosmetics, other food-grade or general-purpose products requiring protection from UV light     |
| M2113 Trans 9425   | Standard  | ●           | High               | Clear, Semi-Outdoor Applications                     | Bird feeders                                                                                               |

## PURGES AND ADDITIVES

| Product         | Impact   | Food-Grade* | UV Inhibitor Level | Description                                | Typical Applications                                                                                                                         |
|-----------------|----------|-------------|--------------------|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| OxyPurge®       | Standard | ----        | ----               | Opaque Purge Compound                      | Clean minor carbon buildup, machine shutdowns, product changes, or unanticipated processing problems in blow molding extruders               |
| Clear OxyPurge® | Standard | ----        | ----               | Clear Purge Compound                       | Extruder shutdowns, power outages, tooling changes, product changeovers, or other short-term interruptions in production                     |
| UV Sorb-1       | High     | ●           | High               | Clear UV Inhibitor Concentrate             | Use with general-purpose or food-grade compounds when packaging UV-sensitive products. Consult PolyOne when using with food-grade compounds. |
| RB-FG           | High     | ●           | ----               | Clear Regrind Booster Additive Concentrate | Food-grade and general-purpose applications where high levels of regrind are required. Consult PolyOne when used in food-grade applications. |

\* The products denoted with a ● are composed of ingredients which meet the current requirements of the Food and Drug Administration (FDA) for food contact applications when used in accordance with the requirements and limitations as outlined in the Title 21 Code of Federal Regulation(s) (21 CFR) as identified for each product. As we cannot control the conditions under which the above products are used in your finished goods, we are not in a position to warrant that your products made from these materials also meet the applicable FDA regulatory requirements. Please conduct confirmatory testing.

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That is our mission at PolyOne, and we fulfill it by delivering premium-quality products and services, which our customers use to enhance their own products. We believe no competitor can match our technical expertise because no workforce can outperform the people of PolyOne. Our people are ONE team working together – our strength and our pride. Their skills, passion, and dedication are shaping a potent industry leader, a concerned corporate citizen, and a great place to work.

#### NORTH AMERICA

PolyOne Corporation  
PolyOne Center  
Avon Lake, OH 44012  
1.866.POLYONE (1.866.765.9663)  
[www.PolyOne.com](http://www.PolyOne.com)

#### EUROPE

PolyOne Belgium SA  
Rue Melville Wilson 2  
5330 Assesse  
Belgium  
+32 (0) 83 660 271  
[info.color@polyone.com](mailto:info.color@polyone.com)  
[www.PolyOne.com](http://www.PolyOne.com)