NOVA Chemicals
Polyethylene

Info Sheet
Caps and Closures

SURPASS® CCs154 Resin

For closures that must meet the strictest processability and performance requirements

CCs154 delivers superior ESCR and organoleptics for next-generation beverage closures.

A product of NOVA Chemicals' Advanced SCLAIRTECH™ Technology, bimodal SURPASS CCs154 is suitable for a broad range of applications, allowing you to use fewer resins. Among its unique balance of properties are high stiffness and impact resistance that make it ideal for lightweighting. It's the right choice for even the most demanding closure applications.

Sustainability

Lightweight, recyclable closures with less compromise

- One-piece closures for better recyclability
- Superior creep resistance improves seal and pressure retention for longer shelf life and less waste
- Reduced doming compared to other HDPE resins enables lightweighting and peace of mind

Processability

Bimodal architecture for efficient production

- Designed for high-speed compression molding while flowing like a typical 7-10 MI water resin under common injection molding shear rates
- Enhanced dimensional stability over a wider processing range promotes energy savings and lower reject rates

Organoleptics

For the most discerning taste buds

- Third-party testing indicates CCs154 imparts the least taste and odor in purified water among tested competitive resins
- Advanced SCLAIRTECH™ technology helps enable best-in-class organoleptics without sacrificing physical performance properties

Performance

Tailored to exceed brand owner requirements for higher consumer confidence

- Superior environmental stress crack resistance (ESCR) for reduced likelihood of premature failures at high temperatures and carbonation levels
- Reliable removal torque and high seal integrity for a consistent consumer experience

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Info Sheet
SURPASS® CCs154 Resin

Applications

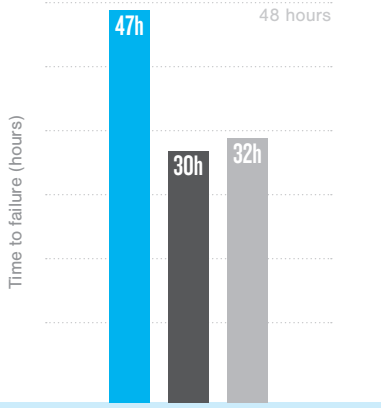
Injection and compression molded caps and closures for:

- Carbonated soft drinks
- Water
- Hot fill
- Fitments
- Oils

CCs154 | Competitor One | Competitor Two

Environment Stress Crack Resistance (ESCR)

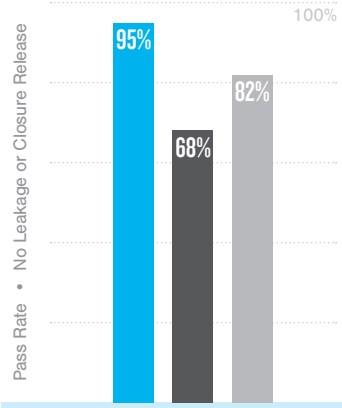
Time to failure of immersed closures on preforms 5.5bar, 50°C, 10% IGEPAL,® 18in-lb



✓ Unmatched ESCR

Seal Integrity

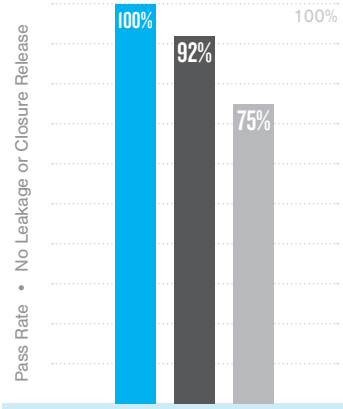
ISBT Secure Seal Test at 100 psi after Elevated Temperature Cycle with 3-week ambient period



✓ Highest seal integrity

Impact Resistance

Pass rate of closures subject to ISBT Ball Impact test at 90° to top edge



✓ Best impact resistance

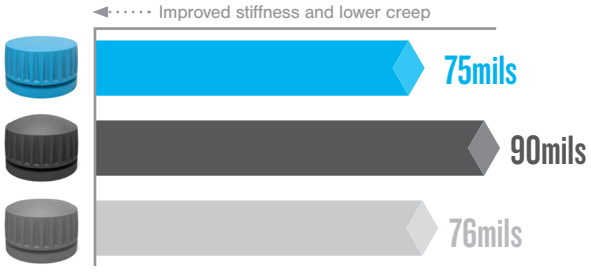
Organoleptic Performance

Independent taste panel assessment of taste and odor performance

✓ Best-rated organoleptic performance

Carbonated Cap Doming

Top panel displacement from pressure equivalent ISBT Elevated Temperature Cycle test



✓ Best doming resistance

All tests performed with compression molded PCO 1881 closures on PET bottles at NOVA Chemicals' state-of-the-art Centre for Performance Applications

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