



GELITA® RXL R² Revolutionary in GELITA's Capsule Release Portfolio

GELITA offers a comprehensive portfolio of gelatines that provides a broad release profile in soft capsules. Beside a variety of versatile and tailor-made standard gelatines, there are GELITA® RXL and GELITA® RXL Advanced for improved capsule shelf-life and stability. These special gelatines provide reliable release and reduced cross-linking properties, even under extreme storage conditions. Now the GELITA capsule gelatine portfolio is complemented by GELITA® RXL R² for revolutionary fill release. The soft capsules produced with GELITA® RXL R² offer faster release of the fill and offer the added advantage of the reduced cross-linking properties of the RXL technology.

Taking Capsule Delivery to the Next Level

Consumers want fast and effective results for immediate relief especially when it comes to Rx, Gx or OTC products like pain medication and cough & cold formulas and even H&N remedies. The innovative GELITA® RXL R² capsule gelatine provides considerable added value, features 3x faster fill release*, enables distinct differentiation in the market and is comprised of 100% gelatine. This is providing capsule producers a considerable edge on the market.

 ${\it *Compared to standard gelatine capsules}.$

Added Value with GELITA's Innovative Approach

- Controlled molecular weight distribution of the gelatine
- Pure gelatine produced according to pharmacopeial standards
- Machinable with standard soft capsule equipment only adjustment of the gel mass formulation
- Available from different raw materials

Release Profile of the GELITA® Portfolio

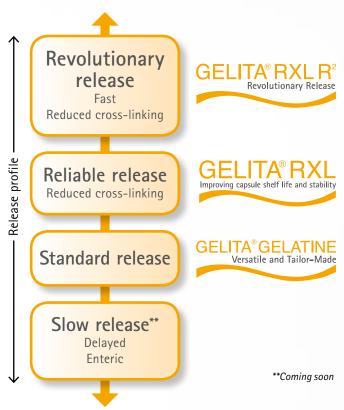




Figure 1: GELITA® RXL R² – fill release of fresh capsules

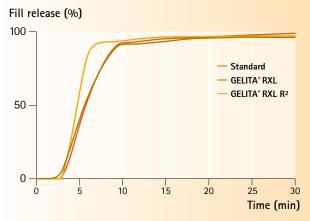
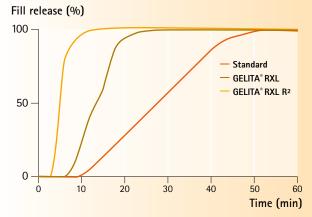


Figure 2: GELITA® RXL R² – fill release 40 °C/75 % r. h. closed after 6 months

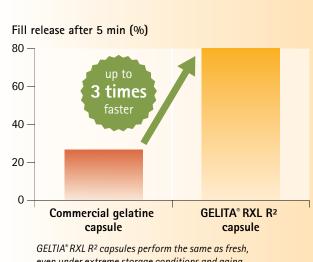


Revolutionary Fill Release

As figure 1 shows, fresh gelatine capsules result in good dissolution. However, fresh capsules made from GELITA® RXL R² provide even faster fill release compared to GELITA® RXL and the corresponding standard gelatine. Within 5 minutes in simulated gastric fluid approximately 80% of the fill of the RXL R² capsule is released.

Figure 2 shows that after 6 months accelerated storage at 40 °C, 75 % r. h. capsules from standard gelatine show noticeable delay in fill release. While capsules made with GELITA® RXL offer improvements, GELITA® RXL R² provides an identical fill release profile as fresh capsules. Comparing capsules made from GELITA® RXL R² and commercial gelatine up to 3 times faster fill release after 5 min can be observed after 6 months of accelerated storage (figure 3). These results prove GELITA® RXL R² not only provides revolutionary release properties but also minimizes cross-linking.

Figure 3: GELITA® RXL R² vs commercial gelatine, 40 °C/75 % r. h. closed after 6 months



GELTIA* RXL R² capsules perform the same as fresh, even under extreme storage conditions and aging. Commercial gelatine capsules are substantially slowed.



Benefits of GELITA® RXL R²

- Promotes consumer compliance (speed of delivery)
- Faster release of the fill
- Improved shelf-life stability (reduced cross-linking)
- 100 % gelatine
- Available from different raw materials
- Designed for Rx, Gx, OTC and H&N products

Protected by Patents

E. g.:

- Europe: 1885771
- USA: 7,485,323 (Product)
- USA: 7,897,728 (Process)
- China: ZL200680009917.1
- Mexico: 283230
- India: 258325



GELITA® RXL R2 Gelatine Types, Pharmaceutical Grade

RAW MATERIAL	NAME OF GELATINE	BLOOM [g]	VISCOSITY 6.67 %/60°C [mPas]
Bovine Bone	GELITA® RXL R ² 115 Bloom Bovine Bone Gelatine	92 - 138	1.5 – 2.5
Bovine Hide	GELITA® RXL R ² 125 Bloom Bovine Hide Gelatine	100 – 150	1.6 – 2.6
Porcine Skin	GELITA® RXL R ² 115 Bloom Porcine Skin Gelatine	92 – 138	1.5 – 2.5

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