

**GELITA® RXL**  
Improving capsule shelf life and stability



Reduced Cross-Linking Gelatines  
**GELITA® RXL Portfolio**



- Improved shelf life
- Enhanced dissolution properties
- New capsule fills

**GELITA**  
Improving Quality of Life

# GELITA® RXL Portfolio: Redefining Capsule Technology

The GELITA® RXL portfolio includes specially designed gelatines to reduce cross-linking in soft capsules. They provide improved stability even under extreme storage conditions with regard to temperature and humidity. These innovative gelatines allow to explore new challenging capsule fills with reactive fill components. The shelf life of capsules comprising GELITA® RXL is significantly extended and the formation of pellicles is reduced to a minimum.

## ! Gelatine Capsules: Performance Profile

- High precision single dosage form
- Protect active ingredients
- Offer high bioavailability
- Present neutral taste and odor
- Promote patient compliance

## ! Added Value with GELITAs Innovative Approach

- Controlled molecular weight distribution of the gelatine
- Pure pharmaceutical and food grade gelatines without any additives
- Machinable like standard gelatines, no process modifications necessary
- Applicable for all gelatine types (e.g. bone and hide gelatine)

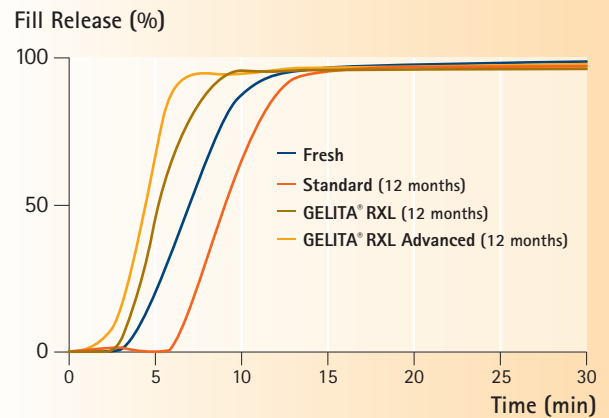


## ! GELITA® RXL Advanced – The Next Generation

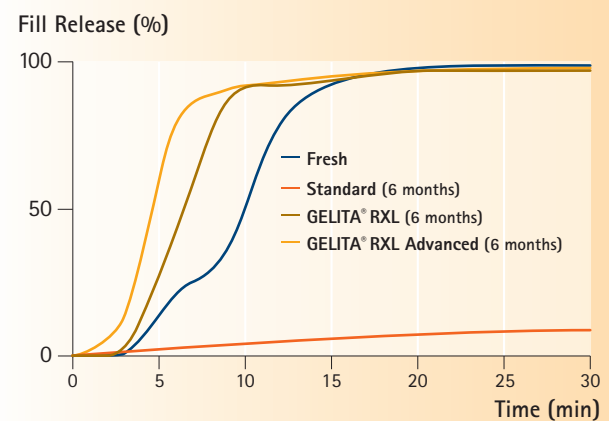
- Long term stability for very critical fillings
- Controlled fill release during shelf life
- Reduced pellicle formation – minimized cross-linking potential
- Improved dissolution performance under accelerated ICH conditions



### Limed Bovine Bone Gelatine at 40 °C/75 % r.h. open



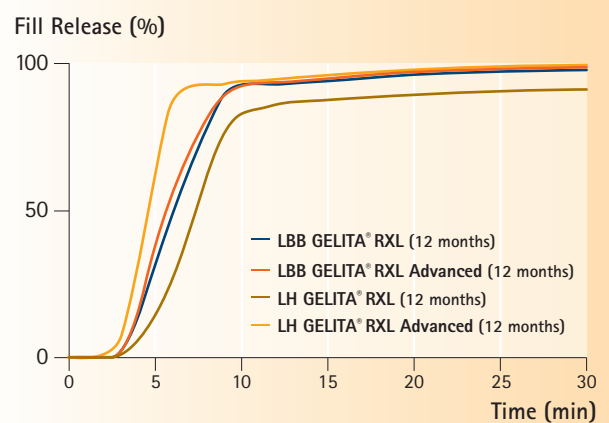
### Limed Bovine Hide Gelatine at 40 °C/75 % r.h. open



## Excellent Fill Release

As the graphs show, the different GELITA® RXL gelatine types provide excellent performance for all viscosity levels. After 6 respectively 12 months storage at 40 °C/75 % r.h. the fill release of soft capsules, comprising GELITA® RXL and GELITA® RXL Advanced gelatines, is improved compared to fresh standard gelatine capsules. The GELITA® RXL Advanced gelatines show better performance than the corresponding GELITA® RXL products and all RXL gelatines have much better fill release than the standard gelatine capsules, produced and stored under the same conditions.

### Bovine Gelatine at 40 °C/75 % r.h. closed





# Benefits of GELITA® RXL Gelatines

- Add value to gelatine capsules
- Enhance capsule dissolution properties
- Improve shelf life, especially at high temperatures and humidity
- Explore new capsule fills
- Designed for pharmaceutical and H&N products

**Protected by Patents**

- U.S.: 7,485,323 and 7,897,728
- China: ZL200680009917.1
- Mexico: 283230
- Indonesia: ID P0028545
- Others pending



## GELITA® RXL Gelatine Types, Pharmaceutical Grade

RAW MATERIAL	NAME OF GELATINE	BLOOM [g]	VISCOSITY 6.67 %/60 °C [mPas]
Bovine Bone	<b>GELITA® RXL</b> 160 Bloom Limed Bovine Bone Gelatine	140 – 180	3.0 – 4.0
	<b>GELITA® RXL Advanced</b> 160 Bloom Limed Bovine Bone Gelatine	140 – 180	2.2 – 3.2
Bovine Hide	<b>GELITA® RXL</b> 170 Bloom Bovine Hide Gelatine	155 – 185	3.4 – 4.2
	<b>GELITA® RXL Advanced</b> 160 Bloom Bovine Hide Gelatine	145 – 175	2.3 – 2.8
Pig Skin	<b>GELITA® RXL</b> 200 Bloom Pig Skin Gelatine	180 – 220	2.5 – 3.5
	<b>GELITA® RXL Advanced</b> 190 Bloom Pig Skin Gelatine	160 – 210	2.2 – 2.7