

Glycine products & grades

Product	Market	Specification
Rexim® Glycine	high quality pharma applications	According to USP/EP/JP
Rexiva™ Glycine	nutritional applications	According to USP/FCC
Glycine	technical applications	in house

Evonik's glycine (gamma) covers all the bases:

- GMP compliance
- ISO certifications 9001, 14001 and 22000
- Audits by customers and agencies (FDA, ANSM)
- HACCP implementation
- High-purity chemical grades and controlled levels of microorganisms and endotoxins
- No chlorinated solvents, preservatives, antioxidants, mycotoxins, aflatoxins, pesticides, hormones, dioxins and cytotoxic compounds
- Non-GMO ingredients
- Kosher and halal certification
- Statements on allergens, residual solvents, and BSE/TSE available
- Non animal origin
- USP, EP, JP, FCC compliant

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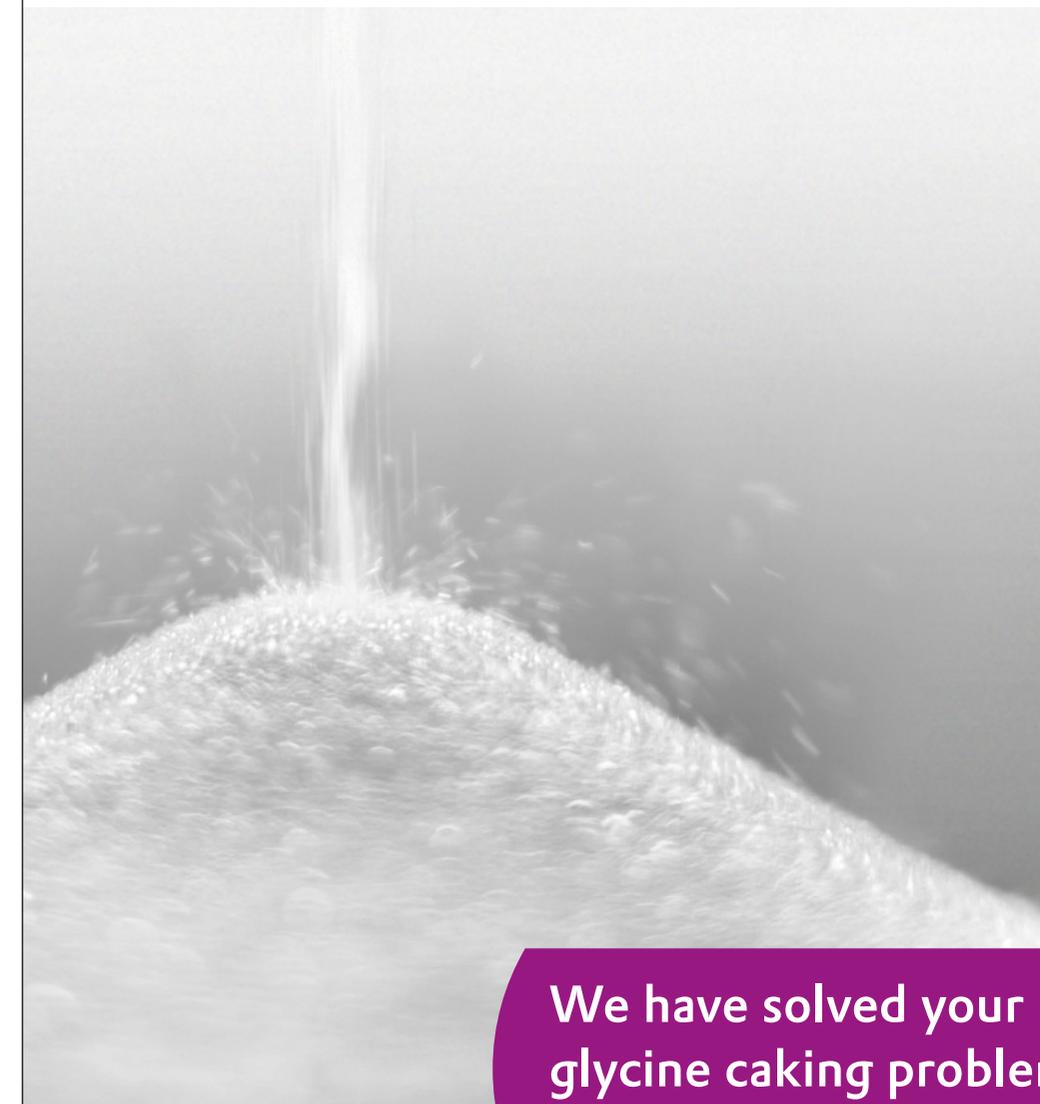
Rexim® = reg. trademark
Rexiva™ = reg. trademark



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We have solved your glycine caking problem.

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The caking challenge

The many virtues of glycine are offset by one major drawback: its tendency to cake during storage.

The caking results in large and extremely hard lumps, which makes glycine processing significantly more difficult and cost-intensive. Because it is very difficult to produce the stable gamma form, the most commonly available variant of glycine is the alpha form. The latter is metastable, however, and can easily transform into the gamma form during storage. This polymorphic transformation is what causes the troublesome caking.*

A product issue compounded by a logistics challenge

As glycine cannot be stored for extended periods without the risk of caking, users depend on just-in-time delivery.** This in turn entails additional logistics constraints that are both complex and cost-intensive.

* Investigation Nos. 731-TA-1112 and 731-TA-1113, US International Trade Commission, Glycine from Japan and Korea

** M. Wang, Study on the Polymorphism and Caking Mechanism of Glycine, 2007



Squaring the glycine circle

Evonik has developed a new process that reliably delivers non-caking glycine in its gamma form.

This more stable glycine (gamma) can be made available in various grades to suit the specific needs of the pharmaceutical, food and technical industries.

The bottom line:

- Fewer supply chain constraints – no need for just-in-time delivery
- Extended storage without the risk of caking
- No additional handling to break down and mill glycine clumps for processing
- Lower costs due to storage, supply chain and production optimization



Pure flowing glycine without changing reagents or solvents

Evonik is able to offer its new non-caking glycine in grades that address the specifics of pharmaceutical, food and technical manufacturing processes. With conventional glycine (alpha), manufacturers often have to include anti-caking agents, which can result in compliance and specification concerns as well as cause appearance problems for users (not USP, not kosher)*.

With Evonik product you have a non-caking glycine without any additions. Furthermore, the new glycine (gamma) process does not require any new reagents or solvents.

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