



Ciba[®] VISCALEX[®] AT89

Thickener and Rheological Control Agent

General

VISCALEX AT89 is a highly effective rheological control additive. It can be used in a wide range of water-based adhesives or latex.

VISCALEX AT89 is especially suited for adhesive systems.

Chemical Nature

VISCALEX AT89 is a formulation based on an acrylic copolymer carried in an aliphatic hydrocarbon also containing a small amount of surfactant which emulsifies the carrier solvent.

The polymer provides the rheological control effect through extensive swelling of the high molecular weight polymer in the presence of water.

Physical Properties (as supplied)

Appearance: white liquid (dispersion)

Active Content: 60 %

Viscosity at 25°C: 1300 mPa·s
(Brookfield 20 rpm)

Density at 20°C: 1.18 g·cm⁻³

Applications

VISCALEX AT89 can be used in a wide range of water-based adhesives and latex. The product is especially suited for adhesive systems.

Typical application examples include

- DIY adhesives
- conventional industrial adhesives, e.g. for the building industry
- adhesives in packaging and woodworking industry
- pressure sensitive adhesives
- high speed machine adhesives.

VISCALEX AT89 is equally effective over the wide pH range 4-12.

Incorporation

- (1) Direct addition to latex or polymer emulsion
Provided efficient mixing equipment is available VISCALEX AT89 can be poured directly into the latex/emulsion. If this is not possible due to machinery limitations localised thickening can be prevented by pre-dilution of the additives with the carrier solvent mixture (aliphatic hydrocarbon) at a ration of 1:2.



Ciba[®] VISCALEX[®] AT89

Thickener and Rheological Control Agent

- (2) Pre-gel
VISCALEX AT89 can be diluted with water to form a stock solution if this method is preferred.

The amount of VISCALEX AT89 required for optimum performance should be determined in trials covering a concentration range.

Recommended concentration:

Adhesives and latex:	0.5 – 1.0 % VISCALEX AT89 (based on total formulation)
pre-gel / stock solutions:	3.0 % VISCALEX AT89 in water

Safety and Handling

VISCALEX AT89 should be handled in accordance with good industrial practice. Detailed information is provided in the Safety Data Sheet.

Storage stability of this product is guaranteed for nine months.

Although VISCALEX AT89 is freeze stable it is recommended to store the product at temperatures above 5°C to enable ease of handling and pourability.

Upon prolonged storage VISCALEX AT89 as supplied tends to exhibit phase separation. Consequently, 'fit-for-use' for batches exceeding the recommended storage time (see Product Specification) is reasonably questionable.

For optimal performance it is recommended to minimise the warehousing time and/or to effectively stir the product approx. every 2 months. Once formulated into a finished system and activated the product is completely free of this effect, forming stable compounds.

Trademark

VISCALEX is a registered trademark.

Important Notice

IMPORTANT: The following supersedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be

Ciba Specialty Chemicals

Coating Effects Segment



Ciba[®] VISCALEX[®] AT89

Thickener and Rheological
Control Agent

liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled or lab work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.