

# N-Acetylcysteine 10% Ophthalmic

The mucolytic drop — dissolving what lubricants alone can't clear.

✓ 10% SOLUTION · PRESERVATIVE-FREE · COMPOUNDING ONLY



When the problem on the corneal surface isn't dryness or inflammation but **abnormal mucus** — tangled filaments, thick plaques, and viscous strands that cling to the epithelium — lubricants and steroids provide incomplete relief at best. **N-Acetylcysteine (NAC) 10% ophthalmic** is a mucolytic and antioxidant that directly cleaves the disulfide bonds holding mucoproteins together, dissolving filaments and plaques at the source. Not commercially available as an eye drop — compounding is the only source.

## How It Works

NAC breaks the **disulfide bonds within mucoproteins**, reducing their chain length and viscosity. This directly dissolves the mucin-epithelial debris complexes that form corneal filaments and plaques. As an antioxidant, NAC also replenishes glutathione at the ocular surface, reducing oxidative stress in the setting of chronic inflammation, chemical injury, and keratitis. The result is a cleaner, less adherent tear film — addressing the mucolytic problem that no lubricant can fix.

## When It's Prescribed

- Filamentary Keratitis**  
 First-line mucolytic for refractory mucin-epithelial filaments that have failed lubricants, bandage lenses, and steroids. Clinical studies confirm resolution in the majority of cases.
- Superior Limbic Keratoconjunctivitis (SLK)**  
 Recommended by corneal specialists when filaments are present — QID as part of stepwise SLK management alongside lubrication and cyclosporine.
- Corneal Mucous Plaques, Keratoconjunctivitis Sicca & MGD**  
 Thick mucous plaques in severe dry eye, Sjögren's syndrome, GVHD, and meibomian gland dysfunction unresponsive to lubrication alone.

## NAC vs. Lubricants for Mucus-Driven Ocular Surface Disease

| Feature                     | NAC 10% Ophthalmic                         | Lubricant Eye Drops               |
|-----------------------------|--|-----------------------------------|
| Mechanism                   | <b>Cleaves mucoprotein disulfide bonds</b> | Dilutes and supplements tear film |
| Dissolves filaments/plaques | ✓ Directly mucolytic                       | ✗ Does not dissolve mucus         |
| Antioxidant activity        | ✓ Replenishes glutathione                  | ✗ No antioxidant effect           |
| Commercial availability     | ✗ Compounding only                         | ✓ OTC                             |

### N-Acetylcysteine 10% Ophthalmic Solution

Preservative-free · sterile · refrigerated

Typical: 1–2 drops affected eye(s) 4× daily · Rx required

### Not Commercially Available

NAC ophthalmic must be compounded — no commercial ophthalmic formulation exists.

5% strength available per prescriber preference.

## Could This Be Right for You?

- You have corneal filaments or mucous plaques that haven't resolved with lubricants, bandage lenses, or steroids
- You've been diagnosed with filamentary keratitis, SLK, or severe dry eye with abnormal mucus production
- You have Sjögren's syndrome, GVHD, or another condition causing chronic mucus-related ocular surface disease
- Your ophthalmologist has prescribed compounded NAC drops and needs a compounding pharmacy

**Ask your eye doctor to send the prescription directly to us.**

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