



Glyoxylic Acid

INCI Glyoxylic acid
CAS 563-96-2

SPECIFICATIONS

Appearance Light yellow liquid
Content (%) 49 – 51
(Glyoxylic acid)
Glyoxal (%) max 0.05

GENERAL INFORMATION

A hair styling ingredient with hair straightening activity. The carboxylic and aldehyde groups of glyoxylic acid react with the amine groups present in hair keratin producing semi-permanent hair straightening without breaking the cystine disulfide bridge. It provides a long lasting, relaxing effect on hair without causing damage to the hair and scalp irritations.

Glyoxylic acid is high purity cosmetic grade with only a trace content of glyoxal and without formaldehyde. This allows formulators to use levels up to 25% in hair straightening cosmetics without exceeding the maximum permitted level of glyoxal established by EU & other cosmetic regulations.

Glyoxylic acid is suitable in hair straightening formulations to smooth wavy & tightly curly hair. When applied with a flat iron (220°C) it softens natural curls providing a shiny, silky appearance and improving hair combability.

Glyoxylic acid is also used as buffering agent.

FORMULATIONS & RECOMMENDATIONS

Easy to use. To be inserted in cold process at a concentration from 1 to 25%. It can be used in shampoo, conditioner or smoothing lotion.

Recommended use concentration
1 – 25 %

Solubility
in water

BENEFITS

- Easy to use
- High efficacy
- Low Glyoxal %

APPLICATIONS

Fragrances

Cosmetics

- Hair conditioner
- Leave-in spray
- Shampoo

SHELF LIFE

12 months under proper storage conditions