

COLOUR TEST

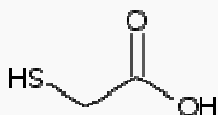
What is thioglycolic acid

The thioglycolic acid (or mercaptoacetic acid) is a carboxylic acid. His structure is comparable to that of a molecule of acetic acid where a hydrogen atom has been replaced by a –SH group.

At room temperature looks like a foul-smelling colourless liquid. Use it to prepare its salts (thioglycolate).

In analytical chemistry is used as a reagent for some metals (iron, tin, etc.). It is a toxic compound, corrosive.

Thioglycolic acid



Name IUPAC

acid 2-mercaptoetanoico

Alternative names

Mercaptoacetic acid


General characteristics

Empirical formula or molecular	HSCH ₂ COOH
Molecular mass (u)	92,11 g/mol
Appearance	Colorless liquid
Number CAS	[68-11-1]

Phisico-chemical properties

Density (g/cm ³ , in c.s.)	1,33 (20 °C)
Solubility in water	(20 °C) soluble
Meltic temperature (K)	257 (-16 °C)
Boiling temperature (K)	493 (220 °C) (1013 hPa)

Safety instructions

Flash point (K)	399 (126 °C) (open vessel)
Symbols in chemical risk	
	
Danger	
Phrases H	301 - 311 - 331 - 314
Advice P	280 - 304+340 - 302+352 - 301+330+331 - 309+310 - 305+351+338

As is commonly used.

In depilatory creams and soaps (as it weakens the keratin structure of the hair without damaging the air bulb), permanent or wavy hair, thioglycolic acid peels for facial or hand anti-aging.

Technical Notes and interaction with other molecules and substances

The colors on the market contain mostly, along with a creamy base that acts as a dispersant matrix, the following substances:

- **Ammonia:** has the function to open the scales of the material trichological, so as to allow the penetration of the dye real;
- **Hydrogen Peroxide:** has the function to eliminate the natural pigments in the hair and to activate the coloring substances which, once oxidized, fit into the fibers.
- **Organic Substances pigmenting (aminophenols, aromatic diamines):** are not dyes in themselves, but intermediate products which, after oxidation, become such. The dyes thus formed, then attach themselves to the keratin of the hair in a stable manner, so that there are more soluble either in water or in most common organic solvents

The thioglycolic acid interferes in the chemical bonds (hydrogen bridges) that constitute the structure of rewinding (secondary and tertiary structure) of the keratin protein constituent materials Haircare.

Distinguishing at least in part the above-mentioned hydrogen bridges, one obtains an opening in the helical structure of keratin, whose coils are imprisoned in the coloring substances which therefore come out, passing into solution in thioglycolic acid.

The thioglycolic acid also does not interact with the natural pigments present in the material trichological, which are bound to the capillary fiber in a much more stable than the artificial coloring, as they are tenacious

STANDARDS OF CONDUCT for those who head.

1. The tester must put a plan in place to prepare, put the gloves, take a clean glass tube with absolute acid solution, heating it and set it aside (then serve as a yardstick for performing the test)
2. Half fill with thioglycolic acid to enter the hair taken from some parts of the body: legs, chest, back, lower body, hind legs, neck and under the neck, close it and start the heating procedure.
3. Bring the liquid to a boil (boiling times vary in time according to external heat, cold, windy conditions, altitude, high pressure, low pressure, if you are outdoors or indoors), during heating in spinning clockwise the tube (it is recommended to use tempered glass, laboratory and not plastic) to prevent breakage.
4. From the moment when the acid begins to boil, we must keep it on the fire about 40 - 50 seconds, stirring continuously to the tube and you get the result.

VISIBLE RESULTS

- **Success**
If the hair is dyed or discolored, and the liquid becomes clear yellow (with all its nuances) to red, brown, and if a heavy load of lead, even purple, depending on how much time has passed from the dye and what kind of dye is used, and also the size of the hair changes thickens in a non-normal, rises to the top and let sit for a long time would form a plug of gelatin. And this is not tolerated.
- **Fail**
 - o If the hair remains intact in its shape and structure and the fluid is clear or slightly clouded the dog is a natural clouding of the liquid has been used by products such as lacquer or antistatic conditioners and shampoos are rich in emollients.

STANDARDS OF CONDUCT for the one being tested

⊗ The person who should be tested will be placed on a table located, will be given to the owner or handler of scissors to remove hair from legs, chest, back, lower body, hind legs, neck and under his neck and asked to they rest on the table.

⊗ The person being tested and his manager will have to be away from the table and did not utter a word, may attend the trial but without disturbing others.

⊗ The testing may require that the test can preside over a political figure or delegating.

Important Safety Note:

- Use gloves and keep away from children, dogs and people.
- not touch the skin with gloves when using the acid as the acid creates small burns, in which case it will begin to peel the hands.
- The tubes must be cleaned, sanitized and dry well.

EVERYTHING 'BE' DONE WITH THE MAXIMUM RELIABILITY 'AND HONEST'.