



ETHYL ACETATE

Key features

- Colorless liquid with a pleasant odor
- Miscible with many organic solvents in all proportions
- Primarily used in numerous coating and ink applications

Product description

Ethyl acetate is a neutral, colorless liquid with a faint and pleasant fruity odor. It is miscible in all proportions with the common organic solvents.

Ethyl acetate is an excellent solvent for nitrocellulose, cellulose ethers, celluloid, chlorinated rubber, some natural resins and numerous synthetic resins such as polyvinyl acetates, polyacrylates, polystyrene (coatings) and alkyd resins as well as plasticizers, fats, waxes and oils. A mixture of **Ethyl acetate** and 20% ethanol is a good solvent for cellulose acetate. Rubber, bitumen, polyisobutylene, polyvinyl carbazole, polyvinyl chloride (not post-chlorinated) and some natural resins (e.g., elemi, shellac, dammar and congo copal) are insoluble in **Ethyl acetate**.

Applications

The main uses of **Ethyl acetate** are in the manufacture of a variety of coating formulations such as epoxies, urethanes, cellulosics, acrylics and vinyls. Applications for these coatings include nitrocellulose and cellulose acetate lacquers, varnishes and shellacs for wood furniture and fixtures, auto refinishing, decorating ceramic objects and architectural coatings for interiors and exteriors. It is a

solvent component in adhesives, spread-coating compounds for artificial leather and cleaners (paint solvents or thinners). Ethyl acetate may be used as a solvent for the isocyanate component of catalyzed lacquers.

Due to its low toxicity and agreeable odor, **Ethyl acetate** has applications as a solvent in inks for flexographic and rotogravure printing, where its main function is to dissolve the resin, control the viscosity and modify the drying rate. **Ethyl acetate** can also be used for preparing wool fabrics for dyeing. It may be used in organic syntheses (esters, drugs) and as an extraction solvent in the production of pharmaceuticals and foods.

Ethyl acetate may also be used as a gelling agent in the manufacture of powder, essences and perfumes, as a denaturant, as an auxiliary in the manufacture of glazed and transparent paper, and as an additive to polishes. In the construction sector, **Ethyl acetate** may be used as a hardener for the alkali-sodium silicate stabilizer (alkali silicates) employed in soil stabilization by the soil injection technique.



Typical Properties**Unit**

Molar mass	g/mol	88.11
Boiling point at 1013 hPa	°C	77.1
Melting point	°C	-83.8
Refractive index nD at 20°C		1.371 – 1.373
Vapor pressure at 20°C	hPa	97.1
at 50°C	hPa	377
Vapor density (air = 1)		3.04
Density at 20°C	g/cm ³	0.8995
Solubility in water at 20°C	% (w/w)	8.0
Water absorption at 20°C	% (w/w)	3.3
Dielectric constant at 20°C		6.0
Evaporation number (diethyl ether = 1)		2.9

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