

$C_6H_{10}O_3$ | $C_8H_{14}O_3$ | $C_8H_{14}O_3$

Carboxylic Anhydrides

Propionic anhydride, n-butyric anhydride and isobutyric anhydride

KEY FEATURES:

- Excellent acylating agents
- High miscibility with organic solvents
- Clear, colorless liquids
- High-purity chemicals





Carboxylic Anhydrides

Propionic anhydride, n-butyric anhydride and isobutyric anhydride

PRODUCT DESCRIPTION

Propionic anhydride is a clear, colorless liquid with an unpleasant, pungent odor. It is miscible in any proportion with most organic solvents. The product hydrates with water and decomposes with alcohol.

n-butyric anhydride is a clear, colorless liquid with an unpleasant, pungent odor. The product hydrates with water and decomposes with alcohol.

Isobutyric anhydride is a clear, colorless liquid with an unpleasant, rancid odor. It is miscible in any proportion with most organic solvents. The product hydrates with water and decomposes with alcohol.

APPLICATIONS

Propionic anhydride may be used as an acylating agent, e.g., in the production of various chemicals: dyes, agrochemicals and cellulose propionate.

n-butyric anhydride may be used as an acylating agent, e.g., in the production of dyes, different chemicals, aromas and agrochemicals.

Isobutyric anhydride may be used as an acylating agent, e.g., in the production of dyes, agrochemicals and other chemicals. It also may be used in the production of cellulose iso-butyrate and cellulose acetate iso-butyrate.

TYPICAL PROPERTIES

	Unit	Propionic Anhydride	n-butyric Anhydride	Isobutyric Anhydride
Molar mass	g/mol	130.14	158.19	158.22
Boiling point at 1013 hPa min. 95% (v/v)	°C	168	198	183
Melting point	°C	-43	-75	-55
Density at 20°C	g/cm ³	1.010 – 1.012	0.966 – 0.967	0.953 – 0.954
Refractive index n _D at 20°C (DIN 51 423)		1.403 – 1.405	1.413 – 1.415	1.405 – 1.407
Viscosity at 20°C	mPa · s	1.14	1.7	1.45
Vapor pressure at 20°C	mbar	1.0	< 0.4	< 1