

Butyl Acrylate

Description

Butyl acrylate is a flammable, colorless and transparent liquid that mixes easily in organic solvents.

Depending on the monomer selection and chemical reaction conditions, various physical properties can be realized after polymerization.

Properties	Unit	Butyl Acrylate	Method
Specification			
Purity		≥99.5	
Color		≤10	
Water Content		≤0.05	
Inhibitor		10~20	
Acidity		≤50	
Specific Gravity		0.896~0.901	
Typical Properties			
Boiling Point		147	
Freezing Point		-64	
Refractive Index	nD	1.419	25°C
Heat Capacity	cal/g°C	0.468	20°C
Heat of Polymerization	cal/g	120.4	
Solubility in Aqueous	wt %	0.2	25°C
aq.in subs	wt %	0.7	25°C
Homopolymer Tg	°C	-54	

Summary

Synonym :

Acrylic acid n-butyl ester

2-Propenoic acid, butyl ester

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CAS No : 141-32-1

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EINECS No : 205-480-7

Chemical Formula

Note

Butyl acrylate is used in the composition of copolymers with various industrial applications.

- Resins and dispersions for paints, varnishes and inks, glues, pressure sensitive adhesives
- Emulsion polymers or dispersions for non-woven fabrics, textiles, paper, leather
- Cleaning and floor waxing products
- Plastics and synthetic resins, synthetic rubbers and latexes

Butyl acrylate is able to addition reaction to the double bond and to polymerize and copolymerize.

Some copolymer reactivity ratios r_1 , r_2 of Butyl acrylate (M1) with various monomers (M2) was calculated from the Alfred & Price equation.

Styrene : $r_1 = 0.07$ $r_2 = 0.45$

Methyl methacrylate : $r_1 = 0.34$ $r_2 = 1.92$

Vinyl acetate : $r_1 = 4.95$ $r_2 = 0.04$

Precaution

The standard inhibitor level is 15 ppm Monomethyl Ether of Hydroquinone (MEHQ).

With this inhibitor, the product should be stored at a temperature of no more than 35 °C and away from light.
It must also be stored under air atmosphere, as the presence of oxygen is essential to maintain the inhibitor effectiveness.
Butyl acrylate is a flammable product, and the appropriate precautions must be taken in handling it.
For more information, please refer a material safety data sheet.

Package

Butyl acrylate is delivered:

- 20MT with ISO tank
- 180Kg with steel drum

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