

## Technical Data Sheet

### Physical and chemical properties:

Product Name	2-Hydroxyethyl Acrylate (HEA)	M.p.	-60 °C
CAS NO.	818-61-1	B.p.	90~92(1.333kPa) 57°C (66.7Pa)
Formula	C5H8O3	F.p.	99°C (Open cup) 97°C (Closed cup)
Molecular weight	116.12	Vapor pressure	<0.1 mm Hg ( 20 °C)
Appearance	Colorless clear liquid	Density	1.106 g/mL at 20°C(lit.)
Refractive index	1.446( 25 °C)	Viscosity	5.34 mPa. s( 25 °C)

### Specifications:

Item	Specification
Appearance:	Clear liquid
Purity (Ester Content):	≥98.0%
Purity:	≥94.0%
Color (Pt-Co):	≤50
Acid value (As AA):	≤0.50 %
Water (m/m):	≤0.50%
Inhibitor (MEHQ):	250±50 ppm

### Applications:

A most popular monomer used for synthesizing both water borne and solvent borne acrylic resins. It supplies primary hydroxyl to acrylic resin which offers fast reaction speed and moderate hardness.

HEA based acrylic resins are widely used in 2KPU coating and heat-curing coatings, like automotive coating, industry coating, protective coating,

2-HEA can also be used in synthesizing emulsion for non-woven textile, wall coating and industry coating.

2-HEA's hydroxyl group can further react with other chemicals, like phosphoric acid, generating new (meth)acrylate structure used in synthesizing acrylic resins.

HEA also used for radcure coating for wood, plastic. It can offer good adhesion to substrate.

### General hints:

Combustible! Polymerization may be initiated by contamination with peroxides, azo compounds, heavy metal ions, tert. Amines, S compounds. Polymerization is also induced by light. Atmospheric oxygen saturation in the monomer is necessary for stability. Storage temperatures should not exceed 35°C.

**Package:**

200kg net weight, or requirement as Customer..

**Transportation and storage:**

Avoid shine rain and high temperature in transportation;

Store the products in cool, shady and ventilated conditions, keep far away from fire; 6 months from date of delivery at a maximum storage temperature of 30°C.