



## Acrylates & Methacrylates Database

This infrared database contains 478 spectra of acrylic and methacrylic compounds. It includes a number of polymeric and monomeric compounds that are used in many common products.

Acrylate monomers are esters which contain vinyl groups with two carbon atoms double-bonded to each other, directly attached to the carbonyl carbon. Acrylate polymers are made from acrylate polymers which are a type of vinyl polymers. When an acrylate has an extra methyl group attached to the alpha carbon, these compounds are considered methacrylates.

An important place is occupied by acrylic and methacrylic acids and their esters among monomers utilized in production of polymeric materials. Acrylic and methacrylic monomers can be polymerized and copolymerized with other vinyl monomers by all known methods with the formation of different high-molecular compounds. These polymers and copolymers possess important properties: by significant weather resistance, transparency, elasticity, water resistance, heat resistance, high mechanical and dielectric characteristics, resistance to aging, good adhesive ability, etc.

Acrylates and methacrylates are a large group of polymers that together form acrylic plastics used in many common products such as plastics, PMMA, coatings, paints, adhesives, and even in the plates that keep light spread evenly across LCD computer and TV screens.

Each compound is listed by its chemical name or commercial name. Pertinent physical and chemical data is included when available.



**Bio-Rad  
Laboratories**

**Informatics Division**  
[www.knowitall.com](http://www.knowitall.com)

**China**  
**Europe**  
**Japan, Taiwan, Korea**  
**Rest of World**  
**USA**

Phone: +1 267 322 6931 • E-mail: [informatics.china@bio-rad.com](mailto:informatics.china@bio-rad.com)  
Phone: +44 20 8328 2555 • E-mail: [informatics.europe@bio-rad.com](mailto:informatics.europe@bio-rad.com)  
Phone: +81 03 (6361) 7080 • E-mail: [informatics\\_jp@bio-rad.com](mailto:informatics_jp@bio-rad.com)  
Phone: +1 267 322 6931 • E-mail: [informatics.row@bio-rad.com](mailto:informatics.row@bio-rad.com)  
Phone: +1 267 322 6931 • 1 888 5 BIO-RAD (888-524-6723) • E-mail: [Informatics.usa@bio-rad.com](mailto:Informatics.usa@bio-rad.com)