

# SARTOMER

Our name means tailor-made.™



## CHEMICAL INTERMEDIATES

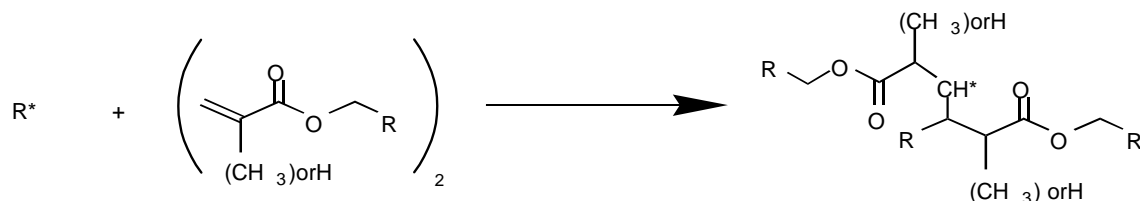
Sartomer offers a number of monomers that function as chemical intermediates. These monomers react with other monomers, oligomers, plasticizers, and resins to form polymers. These monomers are **acrylates** and **methacrylates**, **cyclical and aliphatic**, **alkanes and ether glycols**, **monofunctional and multifunctional**, etc. Sartomer's specialty monomers that act as chemical intermediates are used to produce chemicals that enhance performance properties. The chemical intermediates function in resin modification

for coatings, emulsion polymerization, ionic exchange resins, and super-absorbent polymers. The reaction mechanisms include free radical such as UV/EB or peroxide, Michael addition reactions involving an amine, or reactions with an isocyanate if a hydroxyl group is present.

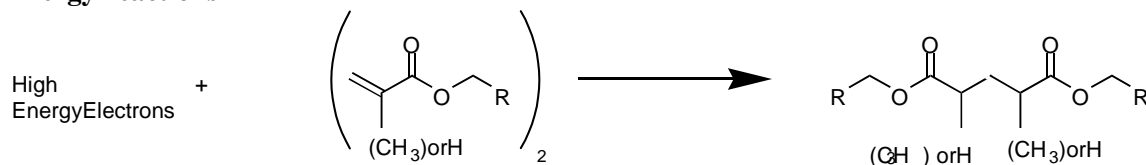
This paper displays the reaction mechanisms for several Sartomer monomers and presents some of the features of the monomers that can be used as chemical intermediates.

### Reaction Mechanisms

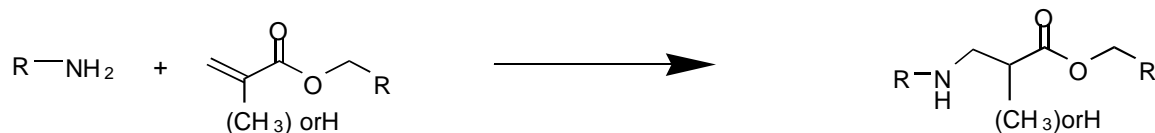
#### Free Radical Reactions



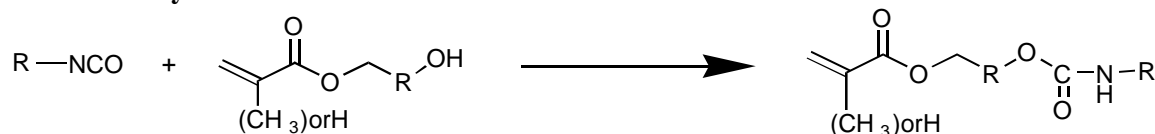
#### High Energy Reactions



#### Michael Addition Reactions



#### Reactions with Isocyanates

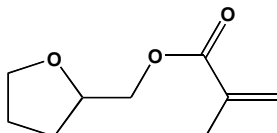




## Cyclic Monomers

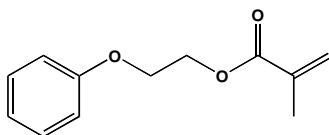
### SR203-TetrahydrofurfurylMethacrylate

- HighTg



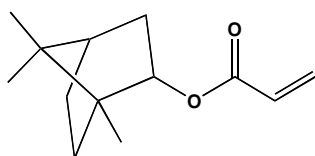
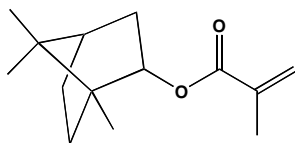
- Excellentsolvencyproperties
- Lowvolatility

### SR340-PhenoxyethylMethacrylate



- Lowvolatility
- ModerateTg
- Improvedheatresistance

### SR423A-IsobornylMethacrylate



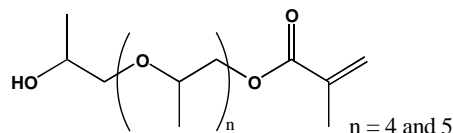
- VeryhighTg
- Highhardness

### SR506D-IsobornylAcrylate

- HighTg
- Highhardness
- Excellentadhesiontodifferentsubstrates

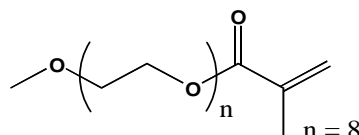
## Specialty Monomers

### SR604-PolypropyleneGlycolMonomethacrylate



- Hydroxyfunctionalmonomer
- Highwatersolubility
- Flexibility

### CD550-MethoxyPolyethyleneGlycol(350)Methacrylate

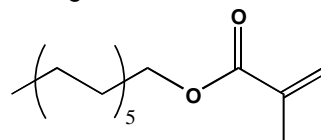


- LowTg
- Excellentwettingproperties
- Watersolubility

## Alkane Monomers

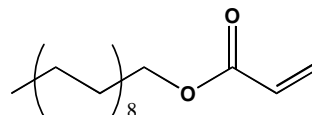
### SR313A-LaurylMethacrylate

- LowTg

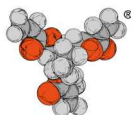


- LowVolatility
- Hydrophobicbackbone

### SR586D-StearylMethacrylate

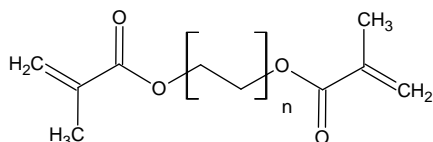


- Lowvolatility
- ModerateTg
- Lowmeltingpoint(21°C)
- Hydrophobicbackbone



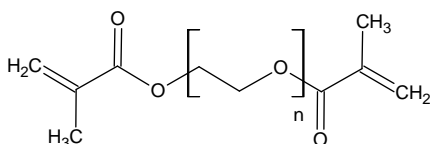
## Crosslinking Monomers

### Alkane Backbone



- SR206-Ethylene Glycol Dimethacrylate
- SR214-1,4-Butanediol Dimethacrylate
- SR239A-1,6-Hexanediol Dimethacrylate
- SR297J-1,3-Butyl Glycol Dimethacrylate

### Ether Backbone



- SR231-Diethylene Glycol Dimethacrylate
- SR205-Triethylene Glycol Dimethacrylate
- SR209-Tetraethylene Glycol Dimethacrylate
- SR210-PEG200 Dimethacrylate
- SR603OP-PEG400 Dimethacrylate

- SR252-PEG600 Dimethacrylate

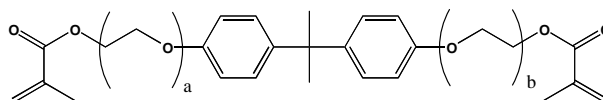
**Note:** Acrylated versions of the monomers presented here are also available.

## Conclusion

Although this is not an exhaustive presentation of intermediates, it is meant to provide information. In addition to these monomers, a few oligomers with both hydroxyl and acrylate functionality are available in our Product Catalog. It should be referenced for a complete list of products.

### Cyclic Backbone

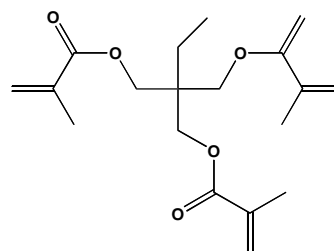
#### Ethoxylated Bisphenol A Dimethacrylate



- SR348L-2 Mole Ethoxylated
- SR348C-3 Mole Ethoxylated
- SR540-4 Mole Ethoxylated
- SR541-6 Mole Ethoxylated
- SR480-10 Mole Ethoxylated
- SR9036-30 Mole Ethoxylated

### Multifunctional Monomer

#### SR350-Trimethylolpropane Trimethacrylate



the Sartomer products that can be used as chemical intermediates and to initiate some novel reaction ideas. Sartomer has a wide range of products, including acrylate and hydroxyl functionality. Sartomer's list of products.