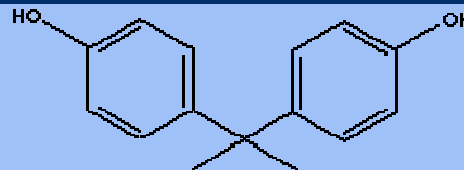


BISPHENOL-A

PRODUCT IDENTIFICATION

| | |
|------------|--|
| CAS NO. | 80-05-7 |
| EINECS NO. | 201-245-8 |
| FORMULA | $(\text{CH}_3)_2\text{C}(\text{C}_6\text{H}_4\text{OH})_2$ |
| MOL WT. | 228.29 |
| H.S. CODE | 2907.23 |



TOXICITY Oral rat LD50: 3250 mg/kg

SYNONYMS 4,4'-Dihydroxy-2,2-diphenylpropane; BPA;

Bis(p-hydroxyphenyl)propane; Bisferol A; Isopropylidenebis(4-hydroxybenzene); 4,4'-Isopropylidene Diphenol; p,p'-Isopropylidenebisphenol; Diphenylolpropane; 1-methylethylidene)bis-Phenol; 2,2-Bis(hydroxy phenyl)propane; p,p'-Bisphenol A; Bis(4-hydroxyphenyl) dimethylmethane; Bis(4-hydroxy phenyl) propane; p,p'-Dihydroxydiphenyldimethylmethane; 4,4'-Isopropylidendiphenol (German); 4,4'-Isopropilidendifenol (Spanish); 4,4'-Isopropylidènedip (French); 4,4'-Dihydroxy diphenyldimethylmethane; p,p'-Dihydroxydiphenylpropane; 2,2-(4,4'-Dihydroxydiphenyl)propane; beta-di-p-hydroxyphenylpropane; 2,2-Di(4-hydroxyphenyl)propane; Dimethyl bis(p-hydroxyphenyl)methane; Dimethylmethylene-p,p'-diphenol; 2,2-Di(4-phenylol)propane; Di-2,2-(4-Hydroxyphenyl) propane; 2,2-di-(4'-Hydroxy phenyl)-propane; beta,beta'- Bis(p-hydroxyphenyl) propane;

DERIVATION

CLASSIFICATION

GENERAL DESCRIPTION

BISPHENOL-A (BPA) is produced through an acid-catalyzed condensation reaction of phenol with acetone. BISPHENOL-A's (BPA) growth prospects remain bright, based on the high growth expected for CDs during the next few years and the emergence of new markets, such as polycarbonates for auto-glazing, that could develop after the turn of the century. Epoxies are projected to grow at a more modest 3 to 4 percent annual rate, based on continued wide acceptance in adhesives, powder coatings, and electrical and electronic applications. Bis-A used in flame retardants is forecast to grow 4 to 5 percent annually through the early years of the new century. In the environmental area, recent industry-sponsored research has found no evidence of biological effects from low-dose exposures to BPA.

PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---------------------|------------------------------------|
| PHYSICAL STATE | Clean prills, phenollike mild odor |
| MELTING POINT | 156 - 159 C |
| BOILING POINT | |
| SPECIFIC GRAVITY | 1.19 - 1.20 |
| SOLUBILITY IN WATER | Insoluble |
| pH | |
| VAPOR DENSITY | |
| AUTOIGNITION | 600 C |
| NFPA RATINGS | |
| REFRACTIVE INDEX | |
| FLASH POINT | 207 C |
| STABILITY | Stable under ordinary conditions |

APPLICATIONS

Polycarbonate resins, epoxy resins, flame retardants (mainly tetrabromobisphenol-A), unsaturated polyester, polysulfone, polyetherimide and polyarylate resins.

SALES SPECIFICATION

| | |
|---|---------------------------------------|
| APPEARANCE | Clean, free-flowing, dust-free prills |
| PURITY | 99.85% min |
| MELTING POINT | 156.5 C min |
| WATER | 0.1% max |
| PHENOL | 100 max (mg/kg) |
| ISOMERS | 1000 max (mg/kg) |
| BTX | 400 max (mg/kg) |
| IRON | 1 max (mg/kg) |
| MOLTEN COLOR | 20max (Pt/Co Scale) |
| ASH | 5 max (mg/kg) |
| TRANSPORTATION | |
| PACKING | |
| HAZARD CLASS | 3 |
| UN NO. | 2924 |
| OTHER INFORMATION | |
| Hazard Symbols: XI, Risk Phrases: 36/37/38-43, Safety Phrases: 24-26-37 | |