The epoxy equivalent increases or decreases depending on the amounts of an epihalohydrin and an alkali metal hydroxide that are used in the reaction.

In the present invention, the "epoxy equivalent" is defined as "the mass of an epoxy resin containing one equivalent of epoxy groups", and can be measured in accordance with JIS K7236.

[0032]

[Method of Producing Epoxy Resin]

A method of producing the epoxy resin of the present embodiment is not particularly limited, and examples thereof include a method of obtaining the epoxy resin by reacting the phenol mixture according to any one of the first to the fourth embodiments of the present invention with an epihalohydrin in the presence of an alkali metal hydroxide.

When the epoxy resin is produced by this method, at least the phenol mixture according to any one of the first to the fourth embodiments of the present invention and an epihalohydrin are used as raw materials, and a polyvalent hydroxy compound other than the above-described phenol mixture (this polyvalent hydroxy compound may be hereinafter referred to as "other polyvalent hydroxy compound") may also be used in combination to produce the epoxy resin. However, from the standpoint of improving the heat resistance of a cured product obtained from the epoxy resin of the present embodiment, it is preferred to use the phenol resin composition of the present embodiment singly.

The term "polyvalent hydroxy compound" used herein is a generic term for a phenol compound having two or more hydroxy groups.

[0033]

Examples of the other polyvalent hydroxy compound include: various polyhydric phenols (excluding the phenol

CLAIMS

1. A phenol mixture, comprising 3,3',5,5'-tetramethyl-4,4'-biphenol as a main component,

wherein the phenol mixture further comprises more than 0.3% by weight but less than 10.0% by weight of a polyphenylene ether, and 1.3% by weight to 4.0% by weight of tetramethyldiphenoquinone.

2. An epoxy resin, obtained by reacting the phenol mixture according to claim 1 with an epihalohydrin.

3. An epoxy resin composition, comprising 0.01 to 1,000 parts by weight of a curing agent with respect to 100 parts by weight of the epoxy resin according to claim 2.

4. The epoxy resin composition according to claim 3, wherein the curing agent is at least one selected from the group consisting of a phenolic curing agent, an amine-based curing agent, a tertiary amine, an acid anhydride-based curing agent, an amide-based curing agent, and an imidazole.

5. The epoxy resin composition according to claim 3 or 4, further comprising an epoxy resin that is different from the epoxy resin contained in the epoxy resin composition.

6. A cured product, obtained by curing the epoxy resin composition according to any one of claims 3 to 5.

7. An electric/electronic component, obtained by curing the epoxy resin composition according to any one of claims 3 or 5.