

(7) Organic High Polymers Obtained by Polycondensation

1. Among the names of the chemical substances which correspond to reference numbers (hereinafter referred to as "Ref. No.") 1 to 352 and 1036 to 2040 in this section, "polyalkylenepolyamine" shall refer to the group expressed by the formula $[C_mH_{2m}NH]_n$ (where m is an integer of 1 to 4, and n is a positive number of 1 to 10), "polyoxyalkylene" shall refer to the group expressed by the formula $[C_mH_{2m}O]_n$ (where m is an integer of 1 to 4 and n is a positive number of 1 to 100), "polyoxymethylene" shall refer to the group expressed by the formula $[CH_2O]_n$ (where n is a positive number of 1 to 10), "polyoxyethylene" and "polyethylene glycol" shall refer to the group expressed by the formula $[CH_2CH_2O]_n$ (where n is a positive number of 1 to 100) and "polyoxypropylene" shall refer to the group expressed by the formula $[CH(CH_3)CH_2O]_n$ (where n is a positive number of 1 to 100); provided, however, that this shall not apply to cases where otherwise specified in the names of the individual chemical substances.
2. Concerning the terms, etc. used in the names of the chemical substances corresponding to Ref. Nos. 758 to 886 and 2041 to 2085, the examples shown below shall be followed:
 - a. "Isocyanate monomer" shall be phenyl isocyanate, tolylene diisocyanate, diphenylmethane diisocyanate, tolydine diisocyanate, naphthalene diisocyanate, triphenylmethane triisocyanate, tris(phenylisocyanate) thiophosphate, phenylene diisocyanate, butyl isocyanate, octadecyl isocyanate, hexamethylene diisocyanate, trimethylhexamethylene diisocyanate, lysine diisocyanate, xylylene diisocyanate, bis(isocyanatomethyl)cyclohexane, dicyclohexylmethane diisocyanate, isopropylidenebis(cyclohexyl isocyanate), isophorone diisocyanate, 3-(2'-isocyanatocyclohexyl)propyl isocyanate, cyclohexyl isocyanate, dianisidine diisocyanate, diphenyl ether diisocyanate, tosyl isocyanate or any combination thereof.
 - b. "Organic isocyanate" shall refer to the concept involving isocyanate monomers specified in a. and the chemical substances corresponding to Ref. Nos. 871 to 885 and 2041.
 - c. The chemical substances for which the terms "aliphatic," "alicyclic" or "aromatic" is used shall contain only carbon, hydrogen and the functional group expressed before or after the terms; provided, however, that this shall not apply to cases where these terms are combined with "-amine", i.e. "aliphatic amine", "alicyclic amine" or "aromatic amine."
 - d. "Aliphatic amine" shall refer to ethylenediamine, diethylenetriamine, ammonia, bis(aminomethyl)cyclohexane, xylylenediamine or alkyl(C₁₋₁₀)amine.
 - e. "Alicyclic amine" shall refer to dicyclohexyldiamine, isophoronediamine, isopropylidenebis(aminocyclohexane), methylenebis(aminocyclohexane), dialkyl(C₁₋₁₀)cyclohexylamine or monoalkyl(C₁₋₁₀)cyclohexylamine.
 - f. "Heterocyclic amine" shall refer to morpholine, piperazine, piperidine, alkyl(C₁₋₁₀)morpholine, alkyl(C₁₋₁₀)piperazine, alkyl(C₁₋₁₀)piperidine or 1-aminoethylpiperazine.
 - g. "Aromatic amine" shall refer to aniline, polymethylenepolychloropolyaniline, polymethylenepolyaniline, daminotoluene, dicarboxyalkyl(C₁₋₁₀) ester diaminodiphenylmethane, phenylenediamine, polychloro-4,4'-diaminodiphenylmethane, 3,3'-dicarboxy-4,4'-diaminophenylmethane, tetraaminodiphenylmethane or 3,3'-dichloro-4,4'-diaminodiphenylmethane.
 - h. "Organic amine" shall be a generic term for aliphatic amine specified in d., alicyclic amine specified in e., heterocyclic amine specified in f. and aromatic amine specified in g.
 - i. "Urethane resin" shall refer to as a resinoid polymer compound obtained from the substances

in (a) and (b) described below, including urethane group, urea group, biuret group, allophanate group, amide group, carbodiimide group, isocyanurate ring, hydantoin ring, oxazolidone ring, imidazolone ring or any combination thereof, and the term in the parentheses just after "urethane resin" shall express an active hydrogen-containing compound exhibiting the characteristic of the urethane resin.

- (a) Organic isocyanates specified in b., chemical substance corresponding to Ref. No. 886, urethane prepolymer specified in j. described below or any combination thereof
 - (b) Chemical substances respectively corresponding to Ref. Nos. 758 to 819, 1356 and 2042 to 2047, hydroxy group terminated (styrene / butadiene copolymer), hydroxy group terminated (butadiene / acrylonitrile copolymer), hydroxy group terminated polybutadiene, epoxy resin specified in 6, alkyd resin specified in 6, polyamide resin specified in 6, polycarbonate resin specified in 6, mastic compound (tar, pitch, asphalt) specified in 6, alkanol(C=1-20), alkenol(C=1-20), adipic acid, [(polyalkylene(C=3,4) glycol / alkylene oxide (C=2-4) adduct) and triethanolamine], [(ethylene oxide / propylene oxide polycondensate), 2-hydroxypropyl acrylate and 2-hydroxypropyl methacrylate] or any combination thereof (These active-hydrogen-containing compounds can be combined with water, alkyl(C=1-20)thiol or any mixture of them.)
- j. "Urethane prepolymer" is an intermediate substance from which urethane resin specified in i. is to be synthesized, made from an isocyanate compound specified in the parentheses just after the term (here, regardless of the specification in b., "Organic isocyanate" shown in the parentheses shall be the concept containing isocyanate monomer specified in a. and chemical substances corresponding to Ref. Nos. 871 to 886 and 2041) and an active-hydrogen-containing compound.
 - k. "Adduct" is a polyisocyanate compound (including adduct of organic isocyanate specified b. and ethyleneimine) composed of an isocyanate monomer specified in a. and water, alcohol or castor oil or any combination thereof, which has urethane group, biuret group, isocyanurate ring (triazine ring) or any combination thereof and contains a small amount of isocyanate monomer specified in a.
 - l. "Block type reactant" is a chemical substance the isocyanate group of which is masked by urethane bond, urea bond or any combination thereof obtained from reaction of isocyanate groups in organic isocyanates specified in b., urethane prepolymers specified in j. or those in both of these molecules, and alcohol, phenol, substitutional phenol, organic amine, oxime or lactam. The masked isocyanate group shall be reproduced by heat treatment.
3. Among the names of the chemical substances corresponding to Ref. Nos. 773 to 867, if "polyether polyol" is simply used, it shall be a generic term for the chemical substances corresponding to Ref. Nos. 758 to 765 and 770.
 4. Among the names of the chemical substances corresponding to Ref. Nos. 822 to 859, "polymer polyol" shall be a generic term for the chemical substances corresponding to Ref. Nos. 773 to 783.
 5. Among the names of the chemical substances corresponding to Ref. Nos. 821 to 867, if "polyester polyol" is simply used, it shall be a generic term for the chemical substances corresponding to Ref. Nos. 784 to 802, 805 and 807 to 819.
 6. The terms "Epoxy resin", "alkyd resin", "polyamide resin", "mastic compound (tar, pitch, asphalt)", "polycarbonate resin" or "phenol resin" found in the list of Existing Chemical

Substances shall refer to the substances which are listed in it (i.e., their Ref. Nos can be found in the list) and be regarded as epoxy resin, alkyd resin, polyamide resin, mastic compound (tar, pitch, asphalt), polycarbonate resin or phenol resin.