(a3-12-13)

(a3-12-14)

-continued

$$R^{\alpha}$$
 O
 O
 SO_2NH_2

$$R^{\alpha}$$
 CN

$$\mathbb{R}^{\alpha}$$
 \mathbb{C}
 \mathbb{C}
 \mathbb{C}

[Chemical Formula 44]

-continued

(a3-12-10) (a3-12-15)
$$R^{\alpha}$$

(a3-12-16)

$$R^{\alpha}$$

(a3-12-16)

20

OH

(a3-12-17)

$$R^{\alpha}$$

(a3-12-17)

 R^{α}
 R^{α}
 R^{α}
 R^{α}

[Structural Unit Represented by General Formula (a3-13)] In general formula (a3-13), R is the same as defined for R in general formula (a3-1).

40 P⁰³ represents —C(=O)—O— or —C(=O)—NRⁿ— (wherein Rⁿ represents a hydrogen atom or an alkyl group of 1 to 5 carbon atoms), and preferably —C(=O)—O—. The alkyl group for Rⁿ is the same alkyl group as described above for R.

The linear hydrocarbon group for W^{03} preferably has 1 to 10 carbon atoms, more preferably 1 to 5 carbon atoms, and still more preferably 1 or 3 carbon atoms.

The linear hydrocarbon group for W⁰³ may have a substitu-50 ent (a) other than —OH, —COOH, —CN, —SO₂NH₂ and —CONH₂. Examples of the substituent (a) include an alkyl group of 1 to 5 carbon atoms, an aliphatic cyclic group (monocyclic group and polycyclic group), a fluorine atom and a fluorinated alkyl group of 1 to 5 carbon atoms. The aliphatic 55 cyclic group for the substituent (a) preferably has 3 to 30 carbon atoms, more preferably 5 to 30, still more preferably 5 to 20, particularly more preferably 6 to 15, and most preferably 6 to 12. As the aliphatic cyclic group, a group in which two or more hydrogen atoms have been removed from a 60 monocycloalkane or a polycycloalkane such as a bicycloalkane, tricycloalkane or tetracycloalkane can be used. Specific examples include groups in which one or more hydrogen atoms have been removed from a monocycloalkane such as cyclopentane or cyclohexane; and groups in which one or 65 more hydrogen atoms have been removed from a polycycloalkane such as adamantane, norbornane, isobornane, tricyclodecane or tetracyclododecane.