(A-2)-74

(A-2)-75

-continued

$$\begin{array}{c} \text{CH}_3 \\ -\text{CH} - \text{O} - \text{CH}_2\text{CH}_2\text{O} \\ -\text{CH}_2\text{CH}_2 - \text{O} - \text{CH} - \\ -\text{CH}_3 \\ -\text{CH}_3 \\ -\text{CH}_3 \\ -\text{O} - \text{CH}_2\text{CH}_2 - \text{O} - \text{CH} - \\ \end{array}$$

$$\begin{array}{c} CH_3 \\ -CH - O - CH_2CH_2O \end{array} \begin{array}{c} CH_3 \\ -CH_3 \\ -CH_3 \end{array} \begin{array}{c} CH_3 \\ -CH_3 \\ -CH_3 \end{array} \begin{array}{c} CH_3 \\ -CH_3 \\ -C$$

In formula (A-3), R^{L5} , R^{L6} and R^{L7} are each independently a monovalent hydrocarbon group, typically a C_1 - C_{20} straight, branched or cyclic alkyl group or C_2 - C_{20} straight, branched or cyclic alkenyl group, which may contain a heteroatom such as oxygen, sulfur, nitrogen or fluorine. A pair of R^{L5} and R^{L6} , R^{L5} and R^{L7} , or R^{L6} and R^{L7} may bond together to form a C_3 - C_{20} aliphatic ring with the carbon atom to which they are attached.

Exemplary groups of formula (A-3) include tert-butyl, triethylcarbyl, 1-ethylnorbornyl, 1-methylcyclohexyl, 1-eth-40 ylcyclopentyl, 2-(2-methyl)adamantyl, 2-(2-ethyl)adamantyl, and tert-pentyl.

Other exemplary groups of formula (A-3) include those of the k g formulae (A-3)-1 to (A-3)-18.

$$\begin{array}{c}
(A-3)-1 \\
 & 50
\end{array}$$

45

$$R^{L14}$$
 R^{L15} R^{L15} R^{L15}

-continued

$$\begin{array}{c}
\mathbb{R}^{L14} \\
\mathbb{R}^{L15}
\end{array}$$

$$\begin{array}{c}
R^{L14} \\
R^{L14}
\end{array}$$
(A-3)-5

$$R^{L14}$$
 R^{L15} (A-3)-6

$$\begin{array}{c}
\mathbb{R}^{L14} \\
\mathbb{R}^{L15}
\end{array}$$

$$\begin{array}{c}
\mathbb{R}^{L17}
\end{array}$$

$$\begin{array}{c}
R^{L14} \\
R^{L15}
\end{array}$$

$$\begin{array}{c}
R^{L17}
\end{array}$$