A Hydrogen Bonded Aluminium Alkoxide Hydroxide Aggregate Resulting from the Exposure of Methylaluminium Dichloride to Air

Norbert W. Mitzel and Christian Lustig

Westfälische Wilhelms-Universität Münster, Institut für Anorganische und Analytische Chemie, Wilhelm-Klemm-Str. 8, D-48149 Münster, Germany

Reprint requests to: Prof. Dr. N. W. Mitzel. Fax (+49) 2518336007. E-mail: mitzel@uni-muenster.de

Z. Naturforsch, **58b,** 489–492 (2003); received February 26, 2003

Exposure of methylaluminium dichloride to air results in the formation of a crystalline hydrolysis/oxidation product of the composition $[(MeOAlCl_2)_3][(MeOAlCl_2)_2(HOAlCl_2)]$, which is linked by a H···Cl hydrogen bond in the solid state. Oxygen is thus inserted into the carbon-aluminium bond in the primary reaction, whereas hydrolysis plays only a minor role.

Key words: Aluminium, Alkoxides, Aggregation