Diagrammes de poudres de l'imino-stilbène, C$_{14}$H$_{11}$N, de l'imino-dibenzyne, C$_{14}$H$_{13}$N, et de son dérivé: le chloro-3 imino-dibenzyne, C$_{14}$H$_{12}$ClN.* Par C. CARANONI, Laboratoire de Physique Cristalline, CNRS - ERA no 545, Faculté des Sciences et Techniques, rue Henri Poincaré, 13397 Marseille CEDEX 13, France et J. P. REBOUL, Laboratoire de Chimie Thérapeutique, Faculté de Pharmacie, 27 boulevard Jean Moulin, 13385 Marseille CEDEX 5, France

(Reçu le 16 juin 1983, accepté le 27 juillet 1983)

Abstract

X-ray powder data have been obtained for the three title compounds, fundamental members of a group of psychotropic drugs. For the first two compounds, the crystal structures of which have previously been solved [Reboul, Cristau, Soyfer & Estienne (1980) Acta Cryst. B36, 2683–2688; Reboul, Cristau, Estienne & Astier, (1980) Acta Cryst B36, 2108–2112], the powder patterns were indexed on the basis of an orthorhombic unit cell with the lattice constants $a=8.22$ (1), $b=20.40$ (1), $c=6.03$ (1) Å, space group $Pnma$ for C$_{14}$H$_{11}$N; C$_{14}$H$_{13}$N is monoclinic, space group $P2_1/ c$ with $a=11.60$ (1), $b=11.27$ (1), $c=20.05$ (1) Å and $\beta=126.5$ (1)°. C$_{14}$H$_{12}$ClN is also monoclinic, $P2_1$, or $P2_1/m$, with $Z=2$, $a=11.68$ (1), $b=8.08$ (1), $c=12.13$ (1) Å and $\beta=95.6$ (1)°. The JCPDS Diffraction File Nos. for these compounds are: C$_{14}$H$_{11}$N 34-1995; C$_{14}$H$_{13}$N 34-1996, C$_{14}$H$_{12}$ClN 34-1994.

*The full text has been deposited with the British Library Lending Division as Supplementary Publication No. SUP 38744 (12 pp.). Copies may be obtained through The Executive Secretary, International Union of Crystallography, 5 Abbey Square, Chester CH1 2HU, England.


A new magnesium aluminium zirconium oxide, Mg$_{5+x}$Al$_{2.4-x}$Zr$_{1.7+0.25x}$O$_{12}$ with $-0.4 \leq x \leq 0.4$.* By PATRICK TASSOT, Mineralogisch-Petrographisches Institut der Universität Kiel, Olshausenstrasse 40, 2300 Kiel, Federal Republic of Germany, GERT KÖNIG, Fa. Martin & Pagenstecher, Bruchfeld 33, 415 Krefeld-Linn, Federal Republic of Germany and FRIEDRICH LIEBAU and FRIEDRICH SEIFERT, Mineralogisch-Petrographisches Institut der Universität Kiel, Olshausenstrasse 40, 2300 Kiel, Federal Republic of Germany

(Received 12 May 1983; accepted 10 August 1983)

Abstract

The title compound has been synthesized by sintering oxide mixtures between 1975 and 2175 K. It decomposes at or below ca 1875 K. Quenched to room temperature, the phase is trigonal with $a_0=3.2496(1)$, $c_0=25.221(1)$ Å, $V=230.65(2)$ Å$^3$, $Z=1$, $D_m=3.95(1)$ g cm$^{-3}$, refraction indices $\varepsilon_{93K}^2 = 1.805(5)$, $\omega_{93K}^2 = 1.855(5)$ and birefringence $\Delta'=0.05$. The JCPDS File No. for magnesium aluminium zirconium oxide is 34-1495.

*The full text has been deposited with the British Library Lending Division as Supplementary Publication No. SUP 38773 (6 pp.). Copies may be obtained through The Executive Secretary, International Union of Crystallography, 5 Abbey Square, Chester CH1 2HU, England.

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