Kladnoite $C_6H_4(CO)_2NH$

Crystal Data: Monoclinic. *Point Group:* $2/m$. Forms elongated crystals, with prominent {100}, {110}, {230}, {120}.

Physical Properties: Hardness = n.d. D(meas.) = 1.47 D(calc.) = 1.469 M.P. 234(1) °C.

Optical Properties: Semitransparent. *Color:* Colorless, white, pale yellow.
Optical Class: Biaxial (+). *Orientation:* $Y \wedge c \simeq 16°$. $\alpha = 1.501$ $\beta = 1.519$ $\gamma = 1.755$
2V(meas.) = n.d.

Cell Data: *Space Group:* $P2_1/n$ (synthetic). $a = 22.83(1)$ $b = 7.651(4)$ $c = 3.810(2)$
$\beta = 91.36(2)°$ Z = 4

X-ray Powder Pattern: Synthetic. (ICDD 28-2013).
5.70 (100), 6.35 (95), 3.28 (30), 11.4 (18), 3.74 (14), 3.38 (14), 3.13 (14)

Chemistry: (1) Stated to be identical to phthalimide.

Occurrence: Formed as a result of fires in coal heaps.

Association: n.d.

Distribution: From the Scholler coal mine, Libušín, Kladno coal basin, about 30 km west-northwest of Prague, and at Radvanice, Czech Republic.

Name: For its occurrence in the Kladno district, Czech Republic.

Type Material: n.d.

References: (1) Rost, R. (1942) Supplements to the mineralogy of the burning (coal) heaps in the region of Kladno. Rozpravy České Akad., 52(25), 4 pp. (2) (1946) Amer. Mineral., 31, 605 (abs. ref. 1). (3) Mazat, E. (1972) Die Kristallstruktur des Phtalimids (Kladnoite) Acta Cryst., 28, 415–418 (in German with English abs.).