

Crystal Data: Monoclinic (pseudo-orthorhombic). *Point Group:* n.d. Commonly microcrystalline powdery, as tabular crystals to 500 nm.

Physical Properties: *Cleavage:* n.d. *Fracture:* n.d. *Tenacity:* n.d. *Hardness =* n.d. *D(meas.) =* n.d. *D(calc.) =* 6.66

Optical Properties: Translucent. *Color:* Canary yellow. *Streak:* Yellow. *Luster:* n.d. *Optical Class:* *n(calc.) =* 1.874

Cell Data: *Space Group:* *P2*, *P2*₁, *P2/m*, or *P2*₁/*m*. *a =* 4.288(2) *b =* 10.270(6) *c =* 6.885(5) *β =* 90.39(4)° *Z =* 4 Suggested by the splitting of some X-ray diffraction lines.

X-ray Powder Pattern: Number 2 Workings, Radium Ridge, South Australia. 3.447 (100), 5.143 (55), 3.428 (29), 1.979 (25), 2.493 (24), 2.862 (19), 1.991 (12)

Chemistry:	(1)	(2)
UO ₃	92.91	93.96
Al ₂ O ₃	0.07	
BaO	0.02	
La ₂ O ₃	0.05	
CeO ₂	0.02	
Nd ₂ O ₃	0.06	
PbO	0.09	
H ₂ O	6.92	6.04
Total	100.14	100.00

(1) Number 2 Workings, Radium Ridge, South Australia; average of 20 electron microprobe analyses, H₂O by TGA; corresponds to UO₃·1.02H₂O. (2) (UO₂)(OH)₂.

Occurrence: A dehydration product of metaschoepite.

Association: Metaschoepite, β-uranophane, weeksite, spriggite.

Distribution: From the Number 2 Workings, Radium Ridge, near Arkaroola, Northern Flinders Ranges, South Australia.

Name: Honors the contributions of Swiss physicist Paul Scherrer (1890-1969) to mineralogy and nuclear physics. Formerly referred to as “dehydrated schoepite.”

Type Material: South Australian Museum, Adelaide, Australia (G31382) and in the Musée Géologique, Lausanne, Switzerland (MGL 79287).

References: (1) Brugger, J., N. Meisser, B. Etschmann, S. Ansermet, and A. Pring (2011) Paulscherrerite from the Number 2 Workings, Mount Painter Inlier, Northern Flinders Ranges, South Australia: “Dehydrated schoepite” is a mineral after all. *Amer. Mineral.*, 96, 229-240.