Axelite  \( \text{Na}_{14}\text{Cu}_7(\text{AsO}_4)_8\text{F}_2\text{Cl}_2 \)

Crystal Data: Tetragonal.  *Point Group*: 4mm.

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

Optical Properties: *Color*: Streak: Luster:
*Optical Class*:

Cell Data: *Space Group*: P4bm.  \( a = 14.5957(2) \)  \( c = 8.3433(2) \)

X-Ray Diffraction Pattern: Arsenatnaya fumarole, Tolbachik volcano, Kamchatka, Russia.
2.747 (100), 3.180 (61), 5.156 (47), 8.32 (44), 2.709 (36), 3.246 (34), 2.580 (29)

Chemistry:

Polymorphism & Series:

Mineral Group:

Occurrence: A sublimate in active volcanic fumaroles.

Association:

Distribution: From the Arsenatnaya fumarole, Second scoria cone, Northern Breakthrough of the Great Tolbachik Fissure Eruption, Tolbachik volcano, Kamchatka, Russia.

Name:

Type Material: A.E. Fersman Mineralogical Museum, RAS, Moscow, Russia (5031/1).