Ravatite

Crystal Data: Monoclinic. Point Group: 2. Thin platy polycrystalline crystals, of irregular shape and porous, to about 0.1 mm, in crusts.

Physical Properties: Cleavage: Perfect on {001}. Tenacity: Sectile. Hardness = ~1
D(meas.) = 1.11(2) D(calc.) = 1.207(1) Pale yellow fluorescence under SW UV.

Optical Properties: Transparent to translucent. Color: Colorless, white, or pale grey with inclusions. Luster: Vitreous to waxy.
Optical Class: Biaxial (+) or (−). α = n.d. β = ~1.75 γ = ~1.95 2V(meas.) = ~90°


X-ray Powder Pattern: Ravat, Tajikistan; shows strong preferred orientation on {001}.

Chemistry:

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>93.41</td>
<td>94.34</td>
</tr>
<tr>
<td>H</td>
<td>5.51</td>
<td>5.66</td>
</tr>
<tr>
<td>Total</td>
<td>98.92</td>
<td>100.00</td>
</tr>
</tbody>
</table>

(1) Ravat, Tajikistan; by CHN analyzer; corresponds to C₁₄H₉. (2) C₁₄H₁₀ [phenanthrene].

Occurrence: A rare sublimate formed in burning coal seams at < 50 °C–60 °C.

Association: Other hydrocarbons, selenium.

Distribution: From near the former village of Ravat, left bank of the Jagnob River Valley, Tajikistan.

Name: For its occurrence near Ravat, Tajikistan.

Type Material: Mining Academy, Freiberg, Germany, 74120.