**Schizolite**

### Crystal Data:
Triclinic.  **Point Group**: 1.  As stacked prismatic columns to 2 cm or as bladed crystals to 1.2 cm.

### Physical Properties:
**Cleavage**: Perfect on {100} and {001}.  **Tenacity**: Brittle.  **Fracture**: Splintery.  **Hardness**: ≈ 5  D(meas.) = n.d.  D(calc.) = 3.09  Nonfluorescent.

### Optical Properties:
**Color**: Pale red or pink to brownish.  **Streak**: White.  **Luster**: Vitreous.  **Optical Class**: Biaxial (+).  \( \alpha = 1.626(3) \)  \( \beta = 1.630(2) \)  \( \gamma = 1.661(2) \)  2V(meas.) = 71(4)°  2V(calc.) = 40°  Nonpleochroic.

### Cell Data:
**Space Group**: P1.  \( a = 7.8551(2) \)  \( b = 6.9715(2) \)  \( c = 6.9173(2) \)  \( \alpha = 90.756(1)° \)  \( \beta = 94.489(1)° \)  \( \gamma = 102.858(1)° \)  \( Z = 2 \)

### X-ray Powder Pattern:
Tutop Agtakôrfia, Ilímaussaq complex, Julianehåb district, Greenland.  2.875 (100), 3.044 (50), 3.241 (3), 3.225 (26), 2.251 (25), 3.005 (15)

### Chemistry:

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SiO₂</td>
<td>52.17</td>
<td>51.71</td>
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<tr>
<td>Al₂O₃</td>
<td>0.06</td>
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<tr>
<td>FeO</td>
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<tr>
<td>MgO</td>
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<td>MnO</td>
<td>13.95</td>
<td>21.79</td>
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<td>CaO</td>
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<tr>
<td>Na₂O</td>
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<tr>
<td>Li₂O</td>
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<td>0.43</td>
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<tr>
<td>H₂O</td>
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<tr>
<td>Total</td>
<td>97.77</td>
<td>97.40</td>
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</tbody>
</table>

(1) Tutop Agtakôrfia, Ilímaussaq complex, Julianehåb district, South Greenland; average electron microprobe analysis; corresponds to \( \text{Na}_{1.08}\text{Ca}_{1.09}\text{Mn}_{0.69}\text{Fe}_{0.12}\text{Si}_{3.03}\text{O}_{8}(\text{OH}) \).  (2) Wessels mine, Kalahari manganese field, Northern Cape Province, South Africa; average electron microprobe analysis, Li by ICPMS; corresponds to \( \text{Li}_{0.10}\text{Na}_{0.906}\text{Ca}_{0.953}\text{M}_{0.007}\text{Mn}_{1.07}\text{Si}_{3}\text{O}_{8}(\text{OH}) \).

### Polymorphism & Series:
Pectolite-schizolite-serandite series.

### Mineral Group:
Pectolite group.

### Occurrence:
In nepheline syenite (Greenland); in skarn formed by metasomatic alteration of manganese rich metasediments (Wessels).

### Association:
Serandite, calcite aegirine, hydroxyapophyllite-(K), pectolite (Wessels).

### Distribution:
From Tutop Agtakôrfia, Ilímaussaq alkaline complex, Julianehåb district, South Greenland [TL].  Wessels mine, Kalahari manganese field, Northern Cape Province, South Africa [originally 'marshallsussmanite'].

### Name:
From the Greek, skhizo, for 'to split' in allusion to its perfect cleavage. Formerly 'marshallsussmanite', now discredited.

### Type Material:
Natural History Museum of Denmark, Copenhagen (NHMD 1899.856 and 1899.8)

### References: