REFERENCES

X-RAY DEBYE-SCHERRER PATTERNS

(Tin-Zinc Alloys)

Plate 45. Tin only (conditions as for Plate 2).
  46. 87% tin.
  47. 35 °
  48. 86 ° (stannate-cyanide bath).
  49. 80% tin (cast anode).
  50. 50 °
  51. Zinc only (conditions as for Plate 4).

Plates 46 - 48 conditions as for Plates 16 - 19.
### Table 46

**X-ray Debye-Scherrer Patterns for Tin-Zinc**

Cr-Kα radiation 2.237 (kX), Vanadium filter
other conditions same as in Table 44.

<table>
<thead>
<tr>
<th>Intensity</th>
<th>hkl</th>
<th>Pyrophosphate bath</th>
<th>Steamategranite</th>
<th>Electrodeposited Tin-zinc</th>
<th>Zinc only</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Tin only</td>
<td>87% Tin</td>
<td>35% Tin</td>
<td>86% Tin</td>
</tr>
<tr>
<td>w</td>
<td>100(2)</td>
<td>2.88</td>
<td>2.91</td>
<td>2.91</td>
<td>2.905</td>
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<tr>
<td>m</td>
<td>101</td>
<td>2.768</td>
<td>2.77</td>
<td>2.79</td>
<td>2.77</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
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<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>v</td>
<td>110(2)</td>
<td>2.066</td>
<td>2.05</td>
<td>2.10</td>
<td>2.09</td>
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<tr>
<td>m</td>
<td>121</td>
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<td>301</td>
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<tr>
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<tr>
<td>m</td>
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<td>1.209</td>
<td>1.209</td>
<td>1.207</td>
<td>1.208</td>
</tr>
</tbody>
</table>
25. Warne, Chem. Abst., 11, 121 (1917); Brit. 10, 155, July (1919).
27. Stareck and Pasaulacqua, Chem. Abst., 44, 1346, 7680 (1950),
U.S. 2,486,246 (1949) and 2,511,952 (1950).
32. Rama Char et al., unpublished work.
34. Vaid and Rama Char, Current Science, 22, 170 (1953).
47. Parks and Le Baron, ibid., 70, 775 (1936).