

Considerations on the color and hopper crystal of bismuth


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When an element is cooled after heating fusion, bismuth of atomic number 83 is a metallic mineral of the characteristic crystal structure called hopper crystal and the fascination with which the various structural color is made. Hopper crystal is the case that a part in the corner where a face touches the side of the crystal grows suddenly, and the facial region part is the crystal which dented. We could learn by trial and error and make now the crystal with some beautiful levels to exhibit and create at the school festival. To make more good crystals, we experimented on what happened to hopper crystal by making it low melting point alloy by mixing with the means of the cooling, lead and a tin. Concerning with the oxide skin formed into an outside was checked about the structural color.

Keywords: Bismuth, Hopper crystal


ビスマス結晶の色と骸晶に関する考察


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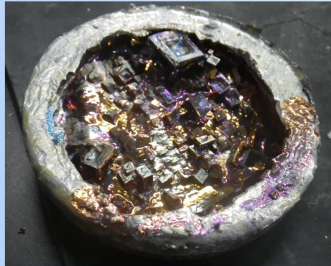

ビスマス 83Bi




融点 271.4°C



秘
冷却



骸晶と構造色



低融点合金
易融合金
酸化被膜

$\text{Bi} + \text{Pb}$
 $\text{Bi} + \text{Sn}$

