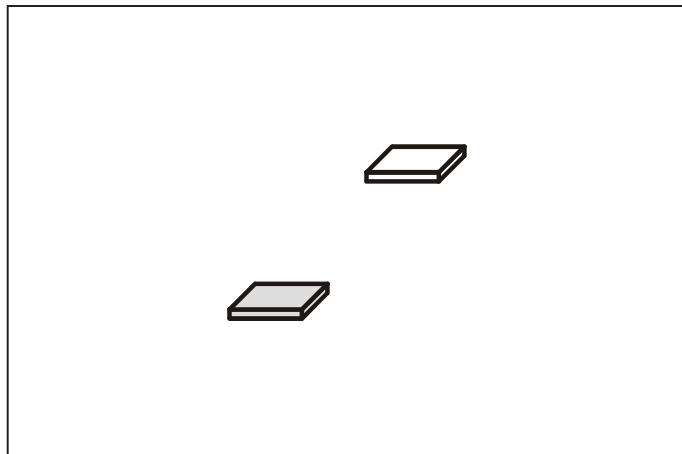


12/01-W97-Sel



1 Description

The crystals have been matched to the dimensions of the pin-hole diaphragm of the film holder X-ray (554 838) and can be used as diffracting crystals for producing Laue diagrams.

2 Technical data

Dimensions: 8 mm × 8 mm × 0,3 mm

Surface: parallel [100]

LiF crystal for Laue diagrams (554 87):

Spacing of lattice planes: 201 pm

Crystal structure: face-centered cubic
 Li: (0,0,0), F: (1/2, 1/2, 1/2)

NaCl crystal for Laue diagrams (554 88):

Spacing of lattice planes: 282 pm

Crystal structure: face-centered cubic
 Na: (0,0,0), Cl: (1/2, 1/2, 1/2)

Notes

The crystals are hygroscopic and extremely fragile:

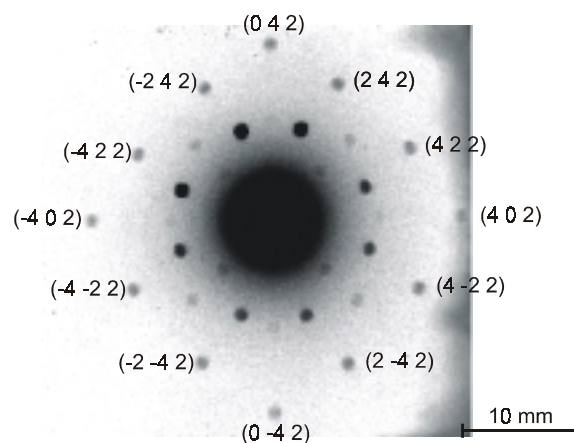
- Store the crystals in a dry place using desiccant if necessary.
- Avoid mechanical stresses on the crystal; handle the crystal by the short faces only.

Instruction sheet 554 87

LiF Crystal for Laue Diagrams (554 87),
 NaCl Crystal for Laue Diagrams (554 88)

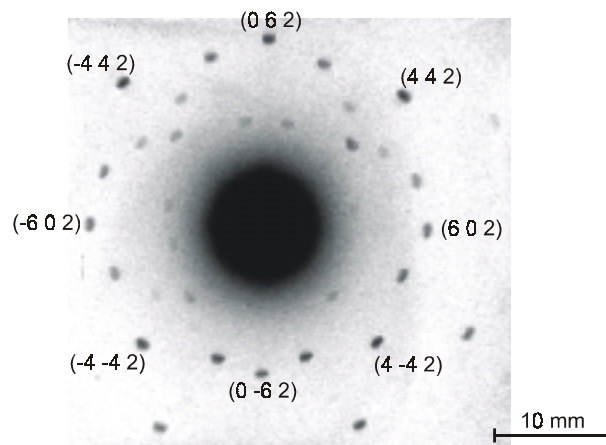
3 Laue diagram

3.1 Laue diagram at LiF:



$U = 35 \text{ kV}$, $I = 1 \text{ mA}$, $L = 11 \text{ mm}$, $\Delta t = 1200 \text{ s}$

3.2 Laue diagram at NaCl:



$U = 35 \text{ kV}$, $I = 1 \text{ mA}$, $L = 15 \text{ mm}$, $\Delta t = 1800 \text{ s}$