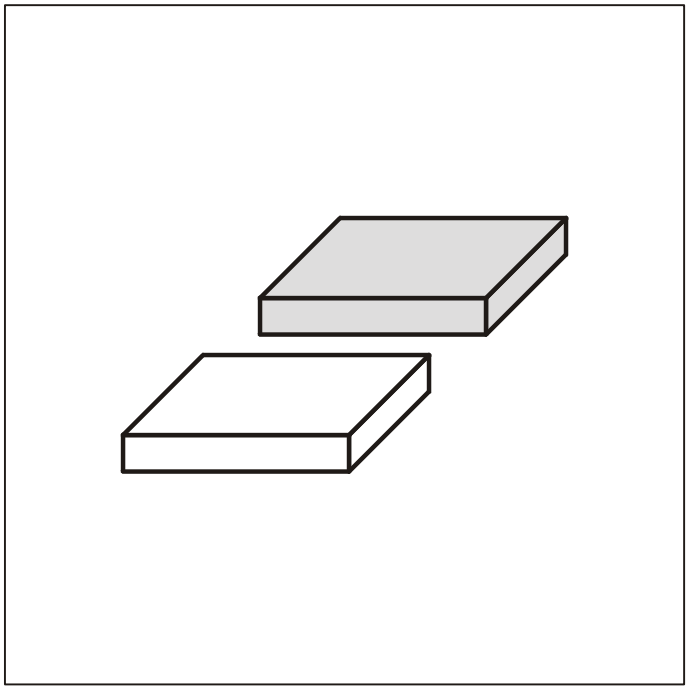
12/01-W97-Sel



Instruction sheet 554 77

LiF crystal for Bragg reflection (554 77),
NaCl crystal for Bragg reflection (554 78)

1 Description

The crystals for Bragg reflection are mono crystals with dimensions, which are particularly suitable for experiments with the goniometer of the X-ray apparatus (554 811). The NaCl crystal for Bragg reflection (554 78) is included in the X-ray apparatus (554 811).

Note

The crystals are hygroscopic and extremely fragile:

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

2 Technical data

Dimensions:	25 mm × 25 mm × 4 mm
Surface:	parallel [100]

LiF crystal for Bragg reflection (554 77):

Spacing of lattice planes:	201 pm
Crystal structure:	face-centered cubic Li: (0,0,0), F: (1/2, 1/2, 1/2)
Reflections:	10.15° for Mo-K_α 9.03° for Mo-K_β 22.53° for Cu-K_α 20.23° for Cu-K_β

NaCl crystal for Bragg reflection (554 78):

Spacing of lattice planes::	282 pm
Crystal structure:	face-centered cubic Na: (0,0,0), Cl: (1/2, 1/2, 1/2)
Reflections:	7,24° for Mo-K_α 6,43° for Mo-K_β 15,85° for Cu-K_α 14,27° for Cu-K_β

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