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## DLC - Diamond-Like-Carbon Coating

### Pressure resistant crucibles for DSC

Diamond-like carbon (DLC) is a glassy-amorphous coating consisting of carbon atoms, that are deposited by evaporation on a supporting surface. This material is **highly inert** against many chemicals.

A new type of DSC crucible has been developed, which has the same dimensions and closing mechanism as the widely-used steel crucibles (M20) but is coated inside with a layer of Diamond-Like-Carbon.

This glass-like coating is chemically highly resistant and allows testing of aggressive media like acids or peroxides. Thus, the advantages of the standard pressure crucible and the glass ampoule are combined in this new sample cell

**Simple:** Easy sealing principle using only two parts allows for smaller sealing pressure and therefore lower mass.

**Reliable:** special construction avoids undesirable surface effects of low viscosity solvents causing difficulties in sealing and artefacts resulting from this.

**Fast:** Low time constants will allow higher heating rates and therefore higher throughput or permit a better signal resolution.

**Improved corrosion resistance:** Diamond-like carbon (DLC) is a glassy-amorphous coating

#### Specifications:

Mass	~ 0.92 g
Dimensions (height/diameter)	4.5 / 7.0 mm
Parts	2
Sealing pressure	4 kN
Maximum operating pressure*	200 bar
Maximum operating temperature	400°C
Internal Volume	20 µl
plating	DLC Diamond-like carbon

\*tested with supercritical pressure of water



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