

Liquid S0 H₂-Target-Parameters

Total amount of Hydrogen in the system: 97 liters at NTP (Deuterium: 103 liters at NTP)

H₂-purity: 6.0

H₂-liquid Volumes:

Target: 7 cm³
= 0.49g H₂ liqu. ≈ 5.8 l H₂ at NTP
L = 10 mm
(H₂-mol= 2.0158, Dens. = 0.07 g/cm³
MolVol 273.15K 1bar: 22.414 10³ cm³ mol⁻¹)
Conn. tubes: 9 cm³
Bottom of condenser: 29 cm³
Distances:
TS2QT11: 1692 mm
TA 1: -580 mm
TA 2: 509 mm

Windows: Ti, 30 mm Ø, 20 µm = 9 mg/cm²
Crash Pressure: 7.5 bar
sealed with Metal Helicoflex[®] Al-coated

Calibration-Target: 78µm Ti = 35 mg/cm²
+ 10 x Mylar/Al (6 µm incl. ≈10 µg/cm² Al)
Distance to Center H₂-Target: +82 mm

Stripping-Foil: 70µm Nb (= 60 mg/cm²)
Distance to Center H₂-Target: +142 mm

Isol.-Vacuum: Turbomolekular-Pump Leybold Ser. 50 33l/s
Roughing Pump Alcatel 15m³/h

Questions? → K.Burkard Tel. 2732 / k.burkard@gsi.de