

Sample description
Folie 700 µAh 575cm LFR ETM EOB 04.11.2021 16:10

Spectrum Filename: D:\User\Messungen\2021\PID2021_421_Nb95_RUN1225.An
1

Acquisition information
Start time: 08.11.2021 10:42:01
Live time: 3600
Real time: 4077
Dead time: 11,70 %
Detector ID: 1

Detector system
D3 Zyklotron

Calibration
Filename: D3_575cm_ETM_LFR_16k_Eu152.Clb
575 cm

Energy Calibration
Created: 13.10.2021 10:11:40
Zero offset: 0,407 keV
Gain: 0,162 keV/channel
Quadratic: 7,031E-09 keV/channel²

Efficiency Calibration
Created: 13.10.2021 10:11:07
Knee Energy: 0,00 keV
Above the Knee: Quadratic Uncertainty = 7,89 %
Log(Eff): $-1,274317E+01 + (5,137919E-01 * \text{Log}(E)) + (-1,017220E-01 * \text{Log}(E)^2)$
Below the Knee: Linear Uncertainty = 0,00 %
Log(Eff): $0,000000E+00 + (0,000000E+00 * \text{Log}(E)) + (0,000000E+00 * \text{Log}(E)^2)$

Library Files
Main analysis library: Nb95_kurz.Lib
Library Match width: 0,750

Analysis parameters
Analysis engine: wan32 G800W064
Start channel: 20 (3,65keV)
Stop channel: 16000 (2600,38keV)
Peak rejection level: 100,000%
Peak search sensitivity: 3
Sample Size: 1,0000E+00 +/- 0,000E+00%
Activity scaling factor: $1,0000E+00 / (1,0000E+00 * 1,0000E+00) = 1,0000E+00$
Detection limit method: Traditional ORTEC method
Random error: 1,0000000E+00
Systematic error: 1,0000000E+00
Fraction Limit: 0,000%
Background width: best method (based on spectrum).
Half lives decay limit: 12,000
Activity range factor: 2,000
Min. step backg. energy: 0,000
Multiplet shift channel: 2,000

Corrections	Status	Comments
Decay correct to date:	NO	
Decay during acquisition:	NO	
Decay during collection:	NO	
True coincidence correction:	NO	

Peaked background correction: NO
 Absorption (Internal): NO
 Geometry correction: NO
 Random summing: NO

Energy Calibration
 Normalized diff: 0,1365

***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

Nuclide	Time of Count Activity Bq/Stk	Uncertainty Counting	3 Sigma Total
Y-88	4,7789E+05	1,110E+01%	1,570E+01%
Y-90M	7,3296E+05	3,842E+01%	3,952E+01%
ZR-95	2,1677E+07	1,849E+00%	9,029E+00%
NB-90 #	4,8887E+04	1,039E+02%	1,042E+02%
NB-91M	7,4454E+07	4,042E+01%	4,257E+01%
NB-92M	9,4271E+07	6,552E-01%	8,736E+00%
NB-94 <	2,5954E+04		
NB-95	2,7423E+07	1,099E+00%	8,896E+00%
NB-95M	2,4558E+07	4,847E+00%	1,052E+01%
NB-96	5,7201E+06	6,649E+00%	1,104E+01%
NB-97	1,1577E+06	1,315E+01%	1,592E+01%
NB-97M	1,0343E+06	3,380E+01%	3,494E+01%

- # - All peaks for activity calculation had bad shape.
- * - Activity omitted from total
- & - Activity omitted from total and all peaks had bad shape.
- < - MDA value printed.
- A - Activity printed, but activity < MDA.
- B - Activity < MDA and failed test.
- C - Area < Critical level.
- F - Failed fraction or key line test.
- H - Half-life limit exceeded

----- S U M M A R Y -----
 Total Activity (3,7 to 2600,4 keV) 2,516E+08 Bq/Stk

Analyzed by: _____
 Dr. K. Franke

Reviewed by: _____
 Supervisor

Laboratory: HZDR

GammaVision Interactive Graph

