

Sample description  
 RUN1127 Folie Blende 5mm 2m

Spectrum Filename: D:\User\Messungen\2020\PID2020\_104\_Folie\_RUN1127.A  
 n1

#### Acquisition information

Start time: 13.07.2020 12:32:44  
 Live time: 2718  
 Real time: 3000  
 Dead time: 9,40 %  
 Detector ID: 4

Detector system  
 D6 156: 20%

#### Calibration

Filename: CAL164\_Eu-152 2m\_Blende\_5mm\_LINEAR.Clb  
 Eu-152

##### Energy Calibration

Created: 14.07.2020 08:06:33  
 Zero offset: 0,132 keV  
 Gain: 0,163 keV/channel  
 Quadratic: 2,590E-09 keV/channel<sup>2</sup>

##### Efficiency Calibration

Created: 14.07.2020 08:08:33  
 Knee Energy: 0,00 keV  
 Above the Knee: Linear Uncertainty = 22,59 %  
 Log(Eff):  $-2,020289E+01 + ( 8,712177E-01 * \text{Log}(E) ) + ( 0,000000E+00 * \text{Log}(E)^2 )$   
 Below the Knee: Quadratic 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.Lib  
 Library Match width: 0,500

#### Analysis parameters

Analysis engine: wan32 G800W064  
 Start channel: 10 ( 1,76keV )  
 Stop channel: 16374 ( 2662,78keV )  
 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: DIN 25 482.5 Nachweisgrenze  
 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:	YES	14.07.2020 08:30:00
Decay during acquisition:	NO	
Decay during collection:	NO	
True coincidence correction:	NO	

Peaked background correction: YES

D6 16k 1d CAL174.Pbc  
12.06.2020 10:16:33

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

Energy Calibration  
Normalized diff: 0,1399

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\*\*\*\*\* 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 Time Corrected Activity Uncertainty Counting 2 Sigma Total  
Bq Bq Bq Bq

Y-88		2,4114E+05	2,3984E+05	1,8397E+04	2,3614E+04
Y-90M	<	1,0141E+06	1,3276E+04		
ZR-95		2,0577E+07	2,0394E+07	4,1047E+05	1,2411E+06
NB-90	#A	1,6496E+04	6,3966E+03	5,4772E+03	5,4900E+03
NB-91M		2,8942E+07	2,8683E+07	1,3355E+06	2,1532E+06
NB-92M		9,0949E+07	8,5933E+07	4,4452E+05	4,9919E+06
NB-94	#A	1,5421E+05	1,5421E+05	1,1376E+05	1,1411E+05
NB-95		2,5999E+07	2,5576E+07	3,7203E+05	1,5156E+06
NB-95M		1,0596E+07	9,0318E+06	2,0215E+06	2,0976E+06
NB-96		9,3152E+06	5,1516E+06	1,2193E+05	3,2016E+05
NB-97		2,1456E+06	>12 Halflives	2,6958E+05	2,9635E+05
NB-97M		1,9507E+06	>12 Halflives	2,7086E+05	2,9310E+05

# - 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 - Halflife limit exceeded

----- S U M M A R Y -----  
Total Activity ( 1,8 to 2662,8 keV) 1,868E+08 Bq  
Total Decayed Activity ( 1,8 to 2662,8 keV) 1,7517035E+08 Bq  
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Analyzed by: \_\_\_\_\_  
Dr. K. Franke

Reviewed by: \_\_\_\_\_  
Supervisor

Laboratory: HZDR

## GammaVision Interactive Graph

