

Memo CP-D/298

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To: Distribution

From: M. Lammer 

Subject: EXFOR coding of "mass yields"

Definitions

type:	<i>Total chain yield:</i>	<i>Mass yield:</i>
definition:	sum of cumulative yields of stable products of a mass chain.	sum of independent yields of a mass chain.
delayed neutron emission:	after dn	before dn
application:	yields at long cooling times	model calculations: definition of fractional yields on-line measurements decay heat

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Explanation and use:

Total chain yields: to be used for measurements with long delay times (i.e. time between end of irradiation and measurement): practically all earlier measurements.

Mass yields: determined (measured or deduced) in fast on-line facilities with delay times shorter than delayed neutron emission.

Other methods: to be decided by the compiler, whether chain or mass yields in the above definitions have to be used in coding of fractional yields.

Proposed coding:

Total chain yields are coded: SF5=CHN (dict.31); dict.36: CHN,FY + modif.
Mass yields, proposed coding: SF5=MAS (dict.31); dict.36:MAS,FY + modif.

Dictionary 31:

MAS Total mass (for yields of fission fragments)

Dictionary 36:

MAS,FY (Mass yield of fission fragments as sum of independent yields)

Fractional yields defined as ratios to mass yields are coded as with total chain yields.