

Upton, Long Island, New York 11973

National Nuclear Data Center  
Bldg. 197D

(516) 282-2901, 2902  
FTS 666

## Memo CP-C/202

**DATE:** August 26, 1991  
**TO:** Distribution  
**FROM:** V.McLane  
**SUBJECT:** 1) Nearly Monoisotopic Elements (re memos 4C-3/358 and CP-D/216)  
2) Excitation energy of compound nucleus  
3) Comments on TRANS A024

### Nearly Monoisotopic Elements

In memos 4C-3/358 and CP-D/216 (comments on transmission tapes) there are comments which reflect a misunderstanding of EXFOR coding rules regarding nearly monoisotopic elements. The manual states:

Nearly monoisotopic elements may be entered with the A (mass number) of their main isotope in the case where there is no noticeable influence from trace isotopes on the data presented.

While NDS may have an internal rule that the main isotope should always be entered in such a case, the NNDC does not agree. We will usually enter the natural element, since this will always be correct, and we will be less likely to introduce an inadvertent error.

Therefore, data sets 13194, A0294 17-19, A0431 2-3, A0434 2-3 are correct as they stand. For data set A0476 3 the target should be coded as 73-TA-181 or the reaction does not make sense.

### Excitation energy of the compound nucleus

The excitation energy of the compound nucleus is not allowed as a substitute for incident projectile energy (data set A0476). Since, for charged particle experiments, it is often given instead of incident projectile energy, it may be worthwhile considering a proposal to allow it.

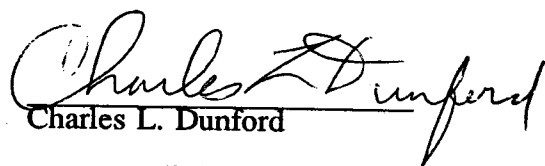
However, a proposal should be made, and agreed to be the other centers before it is used. CaJaD should consider submitting such a proposal, including a LEXFOR entry, before the NRDC meeting in October. The LEXFOR entry should discuss the relationship to incident energy.

Comments on TRANS A024

Following are comments on transmission A024 which are in addition to those comments made in Memo CP-D/216.

TRANS A024

<u>AN</u>	<u>SAN</u>	<u>Seq#</u>	<u>Comment</u>
A0402 *	1 2-7		Decay data should go in SAN to which they apply Illegal secondary energy
A0431	1	11	Duplicate record
A0467	1	9	Duplicate record
A0468	1	9	Duplicate record
A0469	1	21	Delete (MISC-ERR), not necessary and incorrect since not in SAN 2
A0474	1	13	Duplicate record
A0476 *	1 2-4	11 18	Comma missing after blank Subaccession # field The excitation energy of the compound nucleus has not been defined as an independent variable. (See comment).
*	3	3-10	Here the target must be 73-TA-181 or reaction does not make sense.

  
Charles L. Dunford

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