## Memo 4C-3/368

18 May 1993

To:

Distribution

O. heure

From:

H. Wienke and O. Schwerer

Subject:

1. Bremsstrahlung cross section in entry 22206

2. Comments on TRANS 2132

## 1. Bremsstrahlung cross section in entry 22206

In entry 22206 of TRANS 2132 Bremsstrahlung cross sections for the n-p reaction are compiled, using REACTION codes 1-H-1(N,G+N), 1-H-1(N,G+P), 1-H-1(N,INL), which do not conform to present compilation rules for light particle reactions.

We believe that this is a new data type, and - if such data are to be compiled in Exfor - a new way of coding should be proposed.

## **Distribution:**

C.L. Dunford, NNDC N. Tubbs, NEA-DB V.N. Manokhin, CJD V. McLane, NNDC

NDS: R. Arcilla
S. Ganesan
M. Lammer
H.D. Lemmel
A. Pashchenko
O. Schwerer
H. Wienke
3 spare copies

## 2. Comments on TRANS 2132

Entry	Subent	Line(s)	Comment
22200 *)	1 2 3	29 8,26 4	Reaction product should be coded. DATA-ERR should be replaced by ERR-T. $A_0 = \sigma/4\pi$ should be compiled in separate subentry. MB should be replaced by MB/SR. Add A to reaction SF7.
22201	2-4		RATIO should be replaced with DATA and RATIO-ERR with DATA-ERR.
22202	2		Independent variable repeated. Flags (1) - (10) should preferably be split up into separate subentries, or data pointers or a combination of both should be used (separate tables are easier readable).
22203	1,2		Replace DATA-ERR with ERR-T.
22204	1	35	Reaction product should be coded. Add SPA to
	2		REACTION SF8.  Put EN and EN-RSL-HW in common section.  E-EXC-MEAN should be replaced by E-MEAN.
22205 *)	1		EN (1.47MEV) in COMMON section should
	2 - 4		be EN-NRM.  Alternative results must be repeated by pointers, repeating the REACTION ( see
	2 - 10		EXFOR Manual, Ch. 6, Alternative results). Put EN (1.45MEV) in COMMON section of SUBENT 1.
22206 *)	4	3	New data type, see item 1. of this memo.
22207 *)	2 2	3 14	Reaction product missing. EN-MEAN, EN-MIN and EN-MAX should not all be given. Give either EN-MIN and EN-MAX, or EN-MEAN with +- EN-RSL. Replace DATA-ERR with ERR-T.
22208	3	9 19	ATTACHED. Exponent should be right adjusted

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Entry	Subent	Line(s)	Comment
22209	All		Replace DATA-ERR with ERR-T.
22212	2	3 21, 34, 39 3	Reaction product should be coded.  Data missing.  Double capture to be coded
	-	C	(66-DY-165(N,G)66-DY-166,,SPC).
22213	2,4,5 3	3	Reaction product should be coded.
	3	3	Data missing in many lines. REACTION should be (66-DY-164(N,X)0-G-0,,SPC)
22214	17 7 - 29	3 3	Target should probably be 28-NI-58. Add SPA to REACTION SF8.
22215	2 - 16		ERR-1 and ERR-2 should be given in DATA section or should not be coded in SUBENT 1.
	6 14, 15		Delete isomer extension -G+M.  Exponent should be right adjusted in data section.
22216	2 - 11		Put EN-DUMMY, MONIT, MONIT-ERR in COMMON section of subent 1.
	7		Error in reaction code, should be 25-MN-56.
22217	2	8,18	The extrapolated zero-energy value should be coded with DERIV in REACTION SF9.
		20	Independent variable repeated, use data
	3	3	pointers or separate subentries.  Reaction product should be coded.
22218 *)	2 - 5		Reaction product should be coded. Neutron energy missing (should be given in DATA sections or in COMMON section of SUBENT 1).
22219	2, 3		Independent variable repeated, use data pointers instead of flags or split up into separate subentries.
22220	1	13 14 23	Code obsolete, use 3CROZAG. (REAC,2GERJUL) Reaction product should be coded.

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Entry	Subent	Line(s)	Comment
		25,26	DECAY-MON should be changed to DECAY-DATA. MONITOR is probably not needed (same as REACTION, no values given under MONIT).  58-CE-140 should be omitted, decay data belong to 57-LA-140 (even though the gammas are emitted after beta decay).
22221	1		+DATA-ERR, -DATA-ERR, E-ERR and DATA-ERR should be given in corresponding subentries.
	3	16,17	Data missing.
	4	16-21	Data missing.
	•	10 21	Data missing.
22223 *)	2	3	Reaction product should be coded. Remove EN from DATA section and put EN-RSL-HW in COMMON section.
22224	2	3	Reaction product should be coded. Replace DATA-ERR with ERR-T.
22225 *)	1, 2-4		DATA-ERR, RATIO-ERR1 and RATIO-ERR2 should be split up into the corresponding subentries.
	2	14,15	Independent variables repeated, use data pointers instead of flags.
	3, 4		Reactions must be coded: 1-H-1(N,EL)1-H-1,,DA,P). Use DATA, ERR-T in place of RATIO, RATIO-ERR.
22226	1	36	43-TC-100 in SF1 of monitor-reaction code
	2	9 89	needs explanation in free text. E in COMMON section must be E-NRM. Independent variable repeated.
22227	1	9,10	Move second INSTITUTE code to FACILITY (REAC,2DENRIS).
22228 *)	2	3	Incident-neutron energy missing. Reaction product should be coded.
22229	1 All	39	Reaction product should be coded. Replace DATA-ERR with ERR-S.

<sup>\*)</sup> Retransmission requested