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Memo CP-D/730

Date: 17 February 2012
To: Distribution
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Subject: S**pectrum averaged cross section at temperature *kT***
Reference: WP2009-31

When a spectrum averaged cross section is given at a temperature *kT*, the temperature must be coded under the heading KT (Conclusion 13 of the 2009 NRDC Meeting). There are data sets coded with (3/2) *kT* under the heading EN-MEAN. In such subentries, the heading EN-MEAN must be changed to KT and values must be corrected accordingly. All affected subentries are listed below.

Subentry	Additional remarks
22371.004	
22386.014-019	
22388.014-019	REFERENCE : KFK-5967 -> FZKA-5967, also main reference must be J,PR/C,57,391,1998 REACTION: Remove FCT in SF8
22419.002	
22436.003	REFERENCE: INDC(EUR)-039 -> INDC(EUR)-031 The entry must be updated with the main reference J,NP/A,621,262,1997.
22448.002	
22456.004	A similar value is seen in22485.002.
22485.002	
22485.005	REACTION: Remove FCT in SF8
22498.014	Correct DATA values. STATUS: Table 7 -> Table VIII
22498.015-019	STATUS: Table 7 -> Table VIII
22669.003	
22670.002-014	REACTION: Remove FCT in SF8
22692.002-003	
22692.004	DATA: 2.47 mb -> 2.37 mb @ kT=100 keV
22801.002,007	
22804.002	
22813.014-019	
22815.005-007	
22816.008-010	REACTION: Remove FCT in SF8
22816.011	
22829.002-004	
22829.005-008	
22829.009-010	Delete. Not data measured in the experiment.

22841.002	
22846.006	Keep only 30 keV and 500 keV data?
22846.007-010	Delete. Not data measured in the experiment.
22852.003	
22908.002-005	
22908.006	DATA: 2.93 mb -> 2.91 mb @ kT=5 keV
40960.001	REFERENCE: Add `J,SNP,50,375,1989`
40960.073	
40960.074	DATA: 140 mb -> 149 mb
40960.075-080	
40960.081	DATA: 40.4 mb -> 40 mb
40960.082	
41148. 013,016,019, 022,025,028	SF9: `CALC` -> `DERIV`? (MACS derived from unresolved resonance parameters)

Additional remarks

1. Some compilers have applied `MXW/FCT` or `FCT/MXW` in REACTION SF8 for MACS. This `FCT` is unnecessary and its deletion is also asked in the table when necessary.

2. Experimental spectrum averaged cross sections are often complemented by model and/or other experimental results to extract MACS coded in EXFOR (e.g., [1]). Because we have not discussed the most straightforward derivation of experimental MACS, I do not discuss when we should apply `DERIV` in SF9 in this memo. Further discussion and clarification would be necessary.

3. When cross sections averaged for quasi-Maxwellian (e.g., *kT*=25 keV data from KFK) are given, `SPA` is more suitable than `MXW`. The compilers have to check if `SPA` is more suitable when they perform corrections of these subentries.

Reference

[1] K. Wisshak *et al*., Phys. Rev. C**42**(1990)1731 Section VII.

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