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Memo CP-D/574 (Rev.)

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To: Distribution
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Subject: Usage of parameter code TMP (Temperature-dependent quantity)

Usage of the parameter code TMP (Temperature-dependent quantity) is explained in LEXFOR "Sample":

Sample temperature

"At low energies, the data may be dependent on the temperature of the sample. In this case, the data should be coded using the parameter code TMP in REACTION SF6. The sample temperature is coded in the data section under the Heading TEMP."

But some compilers use this modifier when they find temperature of sample in article. We would propose to use TMP for data not measured at the room temperature. Also dictionary 236 explains that TMP is not used when SF3 = THS (thermal scattering).

We would propose the change of the explanation (underlined part):

Sample temperature

"At low energies, the data may be dependent on the temperature of the sample. In this case, the data should be coded using the parameter code TMP in REACTION SF6. Note that TMP should be omitted for data measured at the room temperature (~300 K) and for thermal scattering data (THS in SF3). The sample temperature is coded in the data section under the Heading TEMP."

Subentries coded with TMP in SF6 are listed below with sample temperatures.
(Asterisk shown in "Remark" means that the subentry can be clearly split to two subentries with and without TMP in SF6. and it is recommended.)

Subentry	Reaction	T _{min}	T _{max}	Remark
11782.002	(6-C-0(N,TOT),,SIG/TMP)	300	1020	Ok*
11782.003	(12-MG-0(N,TOT),,SIG/TMP)	101	781	Ok*
11782.004	(13-AL-27(N,TOT),,SIG/TMP)	100	800	Ok*
11782.005	(29-CU-0(N,TOT),,SIG/TMP)	100	1008	Ok*
11782.006	(40-ZR-0(N,TOT),,SIG/TMP)	120	1039	Ok*
11782.007	(82-PB-0(N,TOT),,SIG/TMP)	109	573	Ok*
12243.005	(83-BI-209(N,TOT),,SIG/TMP)	100	500	Ok

14175.002	(1-H-1(N,THS)1-H-1,,SIG/TMP,,REL)	20	20	Delete TMP.
14175.003	(1-H-1(N,THS)1-H-1,,SIG/TMP,,REL)	20	20	Delete TMP.
14175.004	(1-H-MTH(N,THS),,SIG/TMP,,REL)	111	111	Delete TMP.
14175.005	(1-H-MTH(N,THS),,SIG/TMP,,REL)	21	21	Delete TMP.
20161.002	(90-TH-OXI(N,TOT),,SIG/TMP)	293	1023	Ok
20161.003	(92-U-0(N,TOT),,SIG/TMP)	293	293	Delete TMP.
20161.004	(92-U-OXI(N,TOT),,SIG/TMP)	293	293	Delete TMP.
20582.002.1	(12-MG-0(N,TOT),,SIG/TMP)	295	295	Delete TMP.
20582.002.2	(12-MG-0(N,TOT),,SIG/TMP)	120	120	Ok
21016.002	(6-C-0(N,TOT),,SIG/TMP)	295	295	Delete TMP.
21016.003	(6-C-0(N,TOT),,SIG/TMP)	100	100	Ok
21016.004	(6-C-0(N,TOT),,SIG/TMP)	295	295	Delete TMP.
21146.013	(1-H-1(N,TOT),,SIG/TMP)	293	353	Ok*
21146.016	(1-H-1(N,TOT),,SIG/TMP)	253	298	Ok
21146.017	(1-H-1(N,TOT),,SIG/TMP)	293	374	Ok
21146.018	(1-H-1(N,TOT),,SIG/TMP)	244	313	Ok
21146.019	(1-H-1(N,TOT),,SIG/TMP)	219	422	Ok
21146.020	(1-H-1(N,TOT),,SIG/TMP)	293	448	Ok
21274.002	(1-H-1(N,EL)1-H-1,,SIG/TMP)	244	313	Ok
21274.003	(1-H-1(N,EL)1-H-1,,SIG/TMP)	253	298	Ok
21274.004	(1-H-1(N,EL)1-H-1,,SIG/TMP)	219	422	Ok
21274.005	(1-H-1(N,EL)1-H-1,,SIG/TMP)	353	353	Ok
21274.006	(1-H-1(N,EL)1-H-1,,SIG/TMP)	293	448	Ok
21274.008	(1-H-1(N,EL)1-H-1,,SIG/TMP)	293	374	Ok
22357.002	(92-U-238(N,TOT),,SIG/TMP,,RAW)	24	24	Ok
22357.003	(92-U-238(N,TOT),,SIG/TMP,,RAW)	24	24	Ok
22357.004.1	(92-U-238(N,TOT),,SIG/TMP)	24	24	Ok
22357.004.2	(92-U-238(N,TOT),,SIG/TMP)	24	24	Ok
22357.005.1	(92-U-238(N,TOT),,SIG/TMP)	24	24	Ok
22357.005.2	(92-U-238(N,TOT),,SIG/TMP)	24	24	Ok
22357.006	(92-U-238(N,TOT),,SIG/TMP,,RAW)	24	24	Ok
22357.007	(92-U-238(N,TOT),,SIG/TMP,,RAW)	294	294	Delete TMP.
22357.008	(92-U-238(N,TOT),,SIG/TMP,,RAW)	294	294	Delete TMP.
22357.009	(92-U-238(N,TOT),,SIG/TMP,,RAW)	24	24	Ok
22357.010	(92-U-238(N,TOT),,SIG/TMP,,RAW)	294	294	Delete TMP.
22357.011	(92-U-238(N,TOT),,SIG/TMP,,RAW)	294	294	Delete TMP.
22357.012.1	(92-U-238(N,TOT),,SIG/TMP)	294	294	Delete TMP.
22357.012.2	(92-U-238(N,TOT),,SIG/TMP)	294	294	Delete TMP.
22505.002	(29-CU-0(N,TOT),,SIG/TMP)	300	300	Delete TMP.
22505.003	(29-CU-0(N,TOT),,SIG/TMP)	77	77	Ok
22546.002	(10-NE-0(N,TOT),,SIG/TMP)	20	20	Ok
22546.003	(18-AR-0(N,TOT),,SIG/TMP)	77	77	Ok
22876.003.1	(53-I-127(N,TOT),,SIG/TMP)	294	294	Delete TMP.
22876.003.2	(53-I-127(N,TOT),,SIG/TMP)	294	294	Delete TMP.
22954.002	(94-PU-240(N,TOT),,TRN/TMP)	15	15	Ok
22954.003	(94-PU-240(N,TOT),,TRN/TMP)	77	77	Ok
22954.004	(94-PU-240(N,TOT),,TRN/TMP)	294	294	Delete TMP.
22954.005	(94-PU-240(N,TOT),,TRN/TMP)	14	14	Ok
22954.006	(94-PU-240(N,TOT),,TRN/TMP)	300	300	Delete TMP.
22955.002	(94-PU-242(N,TOT),,TRN/TMP)	12	12	Ok
22955.003	(94-PU-242(N,TOT),,TRN/TMP)	77	77	Ok

22955.004	(94-PU-242(N,TOT),,TRN/TMP)	300	300	Delete TMP.
22956.002	(72-HF-0(N,TOT),,TRN/TMP,,AV)	300	300	Delete TMP.
22956.003	(72-HF-0(N,TOT),,TRN/TMP,,AV)	77	77	Ok
22956.004	(72-HF-0(N,TOT),,TRN/TMP,,AV)	300	300	Delete TMP.
22956.005	(72-HF-0(N,TOT),,TRN/TMP,,AV)	77	77	Ok
22956.006	(72-HF-0(N,TOT),,TRN/TMP,,AV)	300	300	Delete TMP.
22956.007	(72-HF-0(N,TOT),,TRN/TMP,,AV)	77	77	Ok
31578.002	(1-H-CXX(N,TOT),,SIG/TMP)	293	293	Delete TMP.
31578.003	(1-H-CXX(N,TOT),,SIG/TMP)	89	89	Ok
31588.002	(1-H-BNZ(N,TOT),,SIG/TMP)	90	90	Ok
31588.003	(1-H-WTR(N,TOT),,SIG/TMP)	115	115	Ok
41295.002	(92-U-235(N,F),,DA/TMP,FF,LEG/RS/FCT)	0.1	0.1	Ok
41357.002	(92-U-235(N,F),PRE,DA/TMP,FF,LEG/RS/FCT)	1	1	Ok
41363.002	(90-TH-232(N,TOT),,SIG/TMP,,AV)	293	293	Delete TMP.
41363.003	(92-U-235(N,TOT),,SIG/TMP,,AV)	293	293	Delete TMP.
41363.004	(94-PU-239(N,TOT),,SIG/TMP,,AV)	293	293	Delete TMP.
41427.002	(92-U-235(N,G)92-U-236,,SIF/TMP,,AV)	100	293	Ok*
41427.003	(92-U-235(N,F),,SIF/TMP,,AV)	100	293	Ok*
O1379.002	(1-H-2(D,P)1-H-3,,SIG/TMP,,SFC)	293	573	Ok*
O1379.003	(1-H-2(D,P)1-H-3,,SIG/TMP,,SFC)	293	473	Ok*

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