

**Nuclear Data Section  
International Atomic Energy Agency  
P.O.Box 100, A-1400 Vienna, Austria**

**Memo CP-D/432**

**Date:** 21 April 2005  
**To:** Distribution  
**From:** O. Schwerer  
**Subject:** Dictionary transmission 9087 and update to new dictionaries

Dictionary transmission 9087 is available from the NDS open area, subdirectory TRANS.DICTS.

Please find the EXFOR dictionaries in file TRANS.9087, a list of all additions and modifications (in archive format) in CHANGES.9087, and the backup file to recreate the DANIEL dictionaries with the program DAN\_LOAD\_NEW as file DAN\_BACK\_NEW.9087. The archive dictionaries are in subdirectory [.ARCHIVE\_9087].

An update to the "new" dictionaries (as agreed at the last NRDC meeting, see CP-D/405 = WP 2004-3) can be found in [TRANS.DICTS.NEWDICTS\_2004.UPDATE\_9087]. Please refer to the above-mentioned memo concerning the details. This update now includes also the new nuclides dictionary 227. Eventually (once all related programs are updated) those dictionaries which are superseded by new ones will no longer be updated (e.g. 36 replaced by 236).

Appended are

- updates of the two correspondence lists of CP-D/405 (Web quantity vs. New CINDA quantity, and CINDA quantity vs. Reaction type) reflecting the changes introduced with this update, and
- the description of dictionary 227 (supplementing the descriptions in CP-D/405).

Distribution:

oblozinsky@bnl.gov  
vml@bnl.gov  
drochman@bnl.gov  
nordborg@nea.fr  
manokhin@ippe.obninsk.ru  
samaev@obninsk.ru  
Mmarina@ippe.obninsk.ru  
blokhin@ippe.obninsk.ru  
feliks@polyn.kiae.su  
chukreev@polyn.kiae.su

S.Dunaeva@iaea.org  
taova@expd.vniief.ru  
varlamov@depni.sinp.msu.ru  
chiba@earth.sgu.ac.jp  
[kato@nucl.sci.hokudai.ac.jp](mailto:kato@nucl.sci.hokudai.ac.jp)  
[ohnishi@nucl.sci.hokudai.ac.jp](mailto:ohnishi@nucl.sci.hokudai.ac.jp)  
[oba@nrdf.meme.hokudai.ac.jp](mailto:oba@nrdf.meme.hokudai.ac.jp)  
[yxzhuang@iris.ciae.ac.cn](mailto:yxzhuang@iris.ciae.ac.cn)  
gezg@iris.ciae.ac.cn  
hongwei@iris.ciae.ac.cn

tarkanyi@atomki.hu  
[stakacs@atomki.hu](mailto:stakacs@atomki.hu)  
katakura@ndc.tokai.jaeri.go.jp  
hasegawa@ndc.tokai.jaeri.go.jp  
vlasov@kinr.kiev.ua  
kaltchenko@kinr.kiev.ua  
ogritzay@kinr.kiev.ua  
jhchang@kaeri.re.kr  
ohtsuka@nucl.sci.hokudai.ac.jp  
m.wirtz@iaea.org  
schwerer@iaeand.iaea.org  
[v.zerkin@iaea.org](mailto:v.zerkin@iaea.org)  
henriksson@nea.fr  
[exfor@nea.fr](mailto:exfor@nea.fr)

## Correspondence Web quantity - CINDA quantity

Revision April 2005 (First version see CP-D/405 of July 2004 or WP 2004-3)

New codes and codes with modifications (**in this version**) are given in *bold italic*

Web Quantity (D.113)	Corresponding CINDA quantities (Dict.45)	Expansion of Web quantity
<b>CS</b>	<b>TSL, CS</b>	Cross section data
CSP	CSN, CSP	Partial cross section data
CST	CST	Temperature dependent cross section data
DA	DA, DAT, DAA, DT	Differential data with respect to angle
DAE	D3E, DAE, D3A, D4A	Differential data with respect to angle and energy
DAP	DAP	Partial differential data with respect to angle
DE	DE, DP	Differential data with respect to energy
DEP	DEP	Partial differential data with respect to energy
E	KE	Kinetic energies
<b>FY</b>	<b>FY, CHG</b>	Fission product yields
INT	INT	Cross section integral over incident energy
L	AMP	Scattering amplitudes
MFQ	NU, ALF, NUD, ETA, <b>NUF</b>	Miscellaneous fission quantities
MLT	MLT	Outgoing particle multiplicities
NQ	NQ	Nuclear quantities
POL	POD, POL	Polarization data
PY	PY	Product yields
RI	RI	Resonance integrals
RP	RP	Resonance parameters
RR	RR	Reaction rates
SP	SPC	Gamma spectra
SQ	KER, SIF	Special quantities
TT	TT	Thick target yields
TTD	TTD	Differential thick target yields
TTP	TTP	Partial thick target yields

### Deleted:

COR

## Correspondence CINDA quantity - Reaction Type

Revision April 2005 (First version see CP-D/405 of July 2004 or WP 2004-3)

New codes and codes with modifications (**in this version**) are given in *bold italic*

New CINDA Quantity (Dict.45)	Reaction Type (Dict.213)	Reaction Type Expansion
ALF	ALF	Alpha (capture-to-fission cs ratio)
	ALR	Alpha at resonance
AMP	L P	Partial length or amplitude
	L	Length or amplitude
<b>CHG</b>	ZP	Most probable charge
	ZPA	Most prob.charge as a fn. of angle
	ZPP	Most prob.charge for given fragm.en.
CS	CS	Cross section
	CS+	Cross section (nonstandard)
	CS 4	Differential d/dAngle * 4pi
CSN	DN	Diff. by no. of outgoing neutrons
CSP	CSP	Partial cross section
	CSP4	Partial differential d/dAngle * 4pi
CST	CST	Temperature dependent cross section
D3A	D3A	Triple differential dAngle1/dAngle2/dE'
D3E	D3E	Triple differential dAngle/dE1'/dE2'
D4A	D4A	Quadruple diff. dAng1/dAng2/dE1'/dE2'
DA	FL	Legendre coefficient
	FS2	Sine**2 coefficient
	FS	Sine coefficient
	FC	Cosine coefficient
	DA	Differential d/dAngle
DAA	D2P	Partial double diff. dAngle1/dAngle2
	DAA	Double differential dAngle1/dAngle2
DAE	DAE	Double differential dAngle/dE'
DAP	DAP	Partial differential d/dAngle
	FLP	Partial Legendre coefficient
	FCP	Partial cosine coefficient
DAT	FLT	Temperature-dependent Legendre coefficient
DE	DE 4	Differential d/dAngle/dE' * 4pi
	DE	Differential d/dE'
DEP	DEP	Energy spectrum for specific group
DP	DP	Diff.by linear momentum of outg.part.
DT	DT	Diff.by 4-momentum transfer squared
EC	EC	Energy correlation
EMC	MC	Effective mass correlation
ETA	ETR	Neutron yield (Eta) at resonance
	ETA	Neutron yield (Eta)
FY	<b>APA</b>	Most prob. mass as a fn. of angle
	<b>APP</b>	Most prob.mass for given fragm.en.
	FYA	Fission product yield as fn. of angle
	FYZ	Fission mass yield
	FYP	Fiss.prod.yield as fn.of sec.part.energy
	FYE	Fission product yield, differential, d/dE
	<b>AP</b>	Most probable mass
	FY	Fission product yield

INT	IAP	Cross sect.integral over inc.en for partl.angle
	IDA	Cross section integral over inc.en., d/dAngle
	INP	Cross sect.integral over inc.en. for given E' or level
	INT	Cross section integral over incident energy
	INT4	Cross section integral over inc.en., d/dAngle * 4pi
KE	E P	Kinetic energy for specific groups
	RPE	Resonance kinetic energy
	E A	Kinetic energy as a fn. of angle
	EDA	Kinetic energy, differential, d/dAngle
	E	Kinetic energy
KER	KER	Kerma factor
LMC	LC	Linear momentum correlation
	LCP	Partial linear momentum correlation
MLT	MTA	Multiplicity d/dA
	MLT	Multiplicity
	YAE	Double-diff. mutiplicity for thick target
	MTE	Multiplicity, partial or d/dE
NQ	NQ	Nuclear quantity
NU	NUR	Neutron yield at resonance
	NUE	Neutron yield dep.on sec.particle energy
	NU	Neutron yield (nu-bar)
NUD	NUD	Delayed neutron yield (nu-bar delayed)
	PN	Delayed neutron emission probabability
	G *	Yield of half-life group
<b>NUF</b>	<b>NUF</b>	<b>Neutron yield of fission fragments</b>
POD	PDT	Differential polarization, d/d(-t)
	PPD	Partial differential polarization, d/dAngle
	PDE	Differential polarization, d/dAngle/dE'
	PTP	Partial differential polarization, d/dAngle, tensor
	POD	Differential polarization, d/dAngle
	PTD	Differential polarization, d/dAngle, tensor
	P3A	Analyzing power dA1/dA2/dE1 for 2 particles
POL	POF	Polarization fitting coefficient
	PPO	Partial polarization
	PO	Polarization
PY	PY	Product yield (other than fission)
	PY+	Product yield (other than fission, nonstandard)
	PYP	Partial product yield
	PY2	Double-diff. Product yield d/dAngle/dEnergy
	PYA	Product yield d/dAngle
RI	RIL	Resonance integral over limited energy range
	RI	Resonance integral
RP	RE	Resonance energy
	RPP	Partial resonance parameter
	RP	Resonance parameter
RR	RR	Reaction rate
SIF	SIF	Self-indication function
SPC	SPA	Secondary energy spectrum as a function of angle
	SP	Secondary energy spectrum
	SPR	Spectrum at resonance
	SPP	Partial secondary energy spectrum (for given level)
TSL	TSL	Thermal-neutron scattering cross section
TT	TT	Thick target yield
	TT+	Thick target yield (nonstandard)
TTD	TDA	Differential thick target yield, d/dAngle
	TDP	Partial differential thick target yield, d/dAngle
	TD2	Differential thick target yield, d/dAngle/dE'
	TDE	Differential thick target yield, d/dE'

TTP

TTP

Partial thick target yield

**Deleted:**

POT

FRS

COR

Dictionary 227: NATURAL ISOTOPIC MIXTURES, AND NUCLIDES

KEY1: EXFOR CODE (A12)

KEY2: field 1: A-SYMBOL (A6)

field 2: INTERNAL NUMERICAL EQUIVALENT (I7)

field 3: USE FLAG (A1):

Z = not to be used in REACTION SF2,3,7, EN-SEC, PART-DET

(where the appropriate particle codes are to be used)

field 4: SPIN/PARITY (A6)

field 5: HALF-LIFE FLAG (A1)

field 6: HALF-LIFE (E11)

field 7: HALF-LIFE UNITS (A3)

field 8: ISOTOPIC ABUNDANCE (E10)

field 9: ATOMIC WEIGHT (E11)

field 10: EXPLANATION (E21)