

Memo 4C-3/344

Proposed Manual entry for the quantity NX = "Nuclide Production"

Reaction	Code	Expansion	Definition and use
	NX	Nucl Product	<p>Definition: This quantity refers to the sum of processes occurring in a given target from which a given nuclide is produced, if these processes are not specified individually. The product nuclide must be given in the "Comments" field, following the author name.</p> <p>Use: For sum cross-sections of reactions in a given target leading to the same product nucleus.</p> <p>At higher energies the target can be a natural element or an isotope; example: $Z-S-A ((n,)+(n,2d)+(n,2n+2p)+...) Z'-S'-A'$.</p> <p>At lower energies the target must be a natural element; example: the target has isotopes Z-A and Z-(A+2); the reactions Z-A (n,) and Z-(A+2) (n,2n) both lead to the product nuclide Z-(A+1).</p> <p>Both cases: If the partial cross-sections leading to the product nuclide are not given, the sum cross section (n,x) is coded as "NX" with the product nuclide specified in the "Comments" field.</p>