

TRIAC-BATAN

TRISO Analysis Code of BATAN

"Developed by Computational Laboratory, Center for Nuclear Reactor Technology and Safety, BATAN"

Case Title: (describe your problem case here)

TRISO Geometry:

Outer radius      CFP      SiC      IPyC      buffer      kernel      center

[m]    4.60E-04    4.20E-04    3.85E-04    3.45E-04    2.50E-04    0

Properties and Operation Parameters:

SiC Tensile Strength [Pa]      Weibull Modulus      Burnup [FIMA]      "Fission Yield  
of stable fission gasses, Ff" Fast Neutron Fluence      Weight ratio of th to U-  
235 in kernel

8.34E+08    8.02    0.09    0.31    2.4

Properties and Operation Parameters related with thermal decomposition:

Alpha Beta

0.0001      4

-1      1401.6      0.1      10

INPUT: Irradiation Temp. Hystory

1	0	593
2	17	833
3	34	1023
4	51	1093
5	68	1123
6	85	833
7	102	1023
8	119	1093
9	136	1123
10	153	833
11	170	1023
12	187	1093
13	204	1123
14	221	833
15	238	1023
16	255	1093
17	272	1123
18	289	833
19	306	1023
20	323	1093
21	340	1123
22	357	833
23	374	1023
24	391	1093
25	408	1123
26	425	833
27	442	1023
28	459	1093
29	476	1123
30	493	833
31	510	1023
32	527	1093
33	544	1123
34	561	833
35	578	1023
36	595	1093
37	612	1123

38	629	833
39	646	1023
40	663	1093
41	680	1123
42	697	833
43	714	1023
44	731	1093
45	748	1123
46	765	833
47	782	1023
48	799	1093
49	816	1123
50	833	833
51	850	1023
52	867	1093
53	884	1123
54	901	833
55	918	1023
56	935	1093
57	952	1123
58	969	833
59	986	1023
60	1003	1093
61	1020	1123

0

-1      180      1

INPUT: Accident Temp. Hystory

1	0	1033
2	0.0271	1033
3	0.2208	1068
4	1	1160
5	10	1571
6	20	1728
7	30	1752
8	35	1749
9	60	1690
10	90	1605
11	120	1526
12	180	1395

0