US EPA ARCHIVE DOCUMENT

(28)

DP Barcode : D190774
PC Code No : 128857
EEB Out : MAY 13 1993

To: Rebecca Cool
Product Manager 41
Registration Division (H7505C)

From: Anthony F. Maciorowski, Chief
Ecological Effects Branch/EFED (H7507C)

Attached, please find the EEB review of...

Reg./File # : 93CA0019
Chemical Name : Myclobutanil
Type Product : Fungicide
Product Name : Rally 40W
Company Name : California Dept. of Food and Agriculture
Purpose : Proposed Section 18 for use on tomatoes.

Action Code : 510 Date Due : 05/19/93
Reviewer : H. Mansfield Date In : 05/04/93

EEB Guideline/MRID Summary Table: The review in this package contains an evaluation of the following:

GDLN NO	MRID NO	CAT	GDLN NO	MRID NO	CAT	GDLN NO	MRID NO	CAT
71-1(A)			72-2(A)			72-7(A)		
71-1(B)			72-2(B)			72-7(B)		
71-2(A)			72-3(A)			122-1(A)		
71-2(B)			72-3(B)			122-1(B)		
71-3			72-3(C)			122-2		
71-4(A)			72-3(D)			123-1(A)		
71-4(B)			72-3(E)			123-1(B)		
71-5(A)			72-3(F)			123-2		
71-5(B)			72-4(A)			124-1		
72-1(A)			72-4(B)			124-2		
72-1(B)			72-5			141-1		
72-1(C)			72-6			141-2		
72-1(D)						141-5		

Y=Acceptable (Study satisfied Guideline)/Concur
P=Partial (Study partially fulfilled Guideline but additional information is needed
S=Supplemental (Study provided useful information but Guideline was not satisfied)
N=Unacceptable (Study was rejected)/Nonconcur

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 13 1993

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Section 18 for the Use of Myclobutanil on Tomatoes in California
DP Barcode: D190774
ID No: 93CA0019

FROM: Anthony F. Maciorowski, Chief
Ecological Effects Branch
Environmental Fate and Effects Division (H7507C)

TO: Rebecca Cool, PM 41
Registration Support Branch
Registration Division (H7505C)

BACKGROUND

The California Department of Food and Agriculture submitted an emergency exemption request for the use of myclobutanil on tomatoes. EEB reviewed a request for the registration of myclobutanil on tomatoes on March 9, 1992. The application rates requested for registration, a maximum of 1.6 oz ai/A per application and 10 oz per year, did not trigger concern for either nontarget endangered or nonendangered species.

The section 18 petition also allows for 1.6 oz. ai/A per application, but 12 oz ai per year may be applied. The only difference in exposure to nontarget organisms, is therefore, on a chronic level.

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RISK ASSESSMENT

Laboratory data provided the following chronic toxicity levels:

- avian (mallard and quail) reproductive NOEL = 60 ppm
- mammalian (rat) reproductive NOEL = 200 ppm
- fish early life stage (fathead minnow) > 2 ppm MATC < 4 ppm.

The worst case terrestrial exposure would occur from birds or herbivorous mammals grazing on short grass contaminated by applications of myclobutanil on tomatoes. The maximum expected residue from three applications is 58.7 ppm (attachment). According to these calculations, reproductive hazard to terrestrial species is not expected. Further, if the maximum application rate of myclobutanil is accidentally applied directly to a 6 foot deep pond, hazard to nontarget aquatic organisms is not expected (attachment).

The review of the section three registration for the use of myclobutanil on tomatoes, dated March 9, 1992, may be referred to for additional information.

CONCLUSIONS

The following environmental hazards labeling should be included in the instructions for this section 18:

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsates.

Based on the available data, the proposed section 18 will not pose a significant risk to nontarget endangered or nonendangered species.

If there are any questions, please contact Heather Mansfield at 305-5064.

DAILY ACCUMULATED PESTICIDE RESIDUES—MULTP. APPL.

Chemical name ———— myclobutanil-6' pond
Initial concentration (ppm) —— .006
Half-life ———— 66
A number of application ——— 3
Application interval ———— 21
Length of simulation (day) —— 365

DAY	RESIDUE (PPM)								
0	.006	51	1.334916E-02	104	7.65099E-03	157	4.38512E-03	210	2.513305E-03
1	5.937317E-03	52	1.320969E-02	105	7.571058E-03	158	4.339307E-03	211	2.487048E-03
2	5.875288E-03	53	1.307169E-02	106	7.491961E-03	159	4.293973E-03	212	2.461065E-03
3	5.813907E-03	54	1.293513E-02	107	7.41369E-03	160	4.249113E-03	213	2.435353E-03
4	5.753168E-03	55	1.279999E-02	108	7.336238E-03	161	4.204721E-03	214	2.409911E-03
5	5.693062E-03	56	1.266627E-02	109	7.259594E-03	162	4.160793E-03	215	2.384734E-03
6	5.633585E-03	57	1.253394E-02	110	7.183751E-03	163	4.117324E-03	216	2.35982E-03
7	5.57473E-03	58	1.240299E-02	111	.0071087	164	4.074309E-03	217	2.335166E-03
8	5.516489E-03	59	1.227341E-02	112	7.034433E-03	165	4.031744E-03	218	2.31077E-03
9	5.458857E-03	60	1.214519E-02	113	6.960943E-03	166	3.989623E-03	219	2.286628E-03
10	5.401827E-03	61	.0120183	114	6.88822E-03	167	3.947943E-03	220	2.26274E-03
11	5.345392E-03	62	1.189275E-02	115	6.816257E-03	168	3.906697E-03	221	.0022391
12	5.289547E-03	63	.0117685	116	6.745046E-03	169	3.865883E-03	222	2.215708E-03
13	5.234286E-03	64	1.164555E-02	117	6.674579E-03	170	3.825495E-03	223	2.192559E-03
14	5.179602E-03	65	1.152389E-02	118	6.604848E-03	171	3.785529E-03	224	2.169653E-03
15	5.12549E-03	66	1.140349E-02	119	6.535845E-03	172	3.74598E-03	225	2.146986E-03
16	5.071942E-03	67	1.128436E-02	120	6.467562E-03	173	3.706845E-03	226	2.124556E-03
17	5.018954E-03	68	1.116647E-02	121	6.399994E-03	174	3.668119E-03	227	2.10236E-03
18	4.96652E-03	69	1.104981E-02	122	6.333132E-03	175	3.629796E-03	228	2.080396E-03
19	4.914633E-03	70	1.093437E-02	123	6.266968E-03	176	3.591875E-03	229	2.058662E-03
20	4.863289E-03	71	1.082013E-02	124	6.201496E-03	177	3.55435E-03	230	2.037154E-03
21	1.081248E-02	72	1.070709E-02	125	6.136707E-03	178	3.517216E-03	231	2.015872E-03
22	1.069952E-02	73	1.059523E-02	126	6.072595E-03	179	3.480471E-03	232	1.994811E-03
23	1.058774E-02	74	1.048454E-02	127	6.009152E-03	180	3.44411E-03	233	1.973971E-03
24	1.047713E-02	75	1.037501E-02	128	5.946373E-03	181	3.408128E-03	234	1.953348E-03
25	1.036767E-02	76	1.026662E-02	129	5.88425E-03	182	3.372523E-03	235	1.932941E-03
26	1.025935E-02	77	1.015936E-02	130	5.822775E-03	183	3.337289E-03	236	1.912747E-03
27	1.015217E-02	78	1.005322E-02	131	5.761944E-03	184	3.302424E-03	237	1.892765E-03
28	1.004611E-02	79	9.948191E-03	132	5.701747E-03	185	3.267922E-03	238	1.87299E-03
29	9.941155E-03	80	9.84426E-03	133	5.642179E-03	186	3.233781E-03	239	1.853422E-03
30	9.837298E-03	81	9.741414E-03	134	5.583234E-03	187	3.199997E-03	240	1.834059E-03
31	9.734524E-03	82	9.639643E-03	135	5.524905E-03	188	3.166566E-03	241	1.814898E-03
32	9.632824E-03	83	9.538936E-03	136	5.467184E-03	189	3.133484E-03	242	1.795938E-03
33	9.532187E-03	84	9.43928E-03	137	5.410067E-03	190	3.100748E-03	243	1.777175E-03
34	9.432602E-03	85	9.340664E-03	138	5.353547E-03	191	3.068353E-03	244	1.758608E-03
35	9.334058E-03	86	9.243081E-03	139	5.297617E-03	192	3.036297E-03	245	1.740236E-03
36	9.236542E-03	87	9.146515E-03	140	5.242271E-03	193	3.004576E-03	246	1.722055E-03
37	9.140046E-03	88	9.050959E-03	141	5.187503E-03	194	2.973186E-03	247	1.704064E-03
38	9.044558E-03	89	8.956401E-03	142	5.133308E-03	195	2.942125E-03	248	1.686261E-03
39	8.950066E-03	90	8.862831E-03	143	5.079679E-03	196	2.911387E-03	249	1.668644E-03
40	8.856562E-03	91	8.770239E-03	144	5.02661E-03	197	2.880972E-03	250	1.651212E-03
41	8.764035E-03	92	8.678613E-03	145	4.974095E-03	198	2.850873E-03	251	1.633961E-03
42	1.467248E-02	93	8.587945E-03	146	4.92213E-03	199	2.821089E-03	252	1.61689E-03
43	1.451919E-02	94	8.498226E-03	147	4.870706E-03	200	2.791616E-03	253	1.599999E-03
44	.0143675	95	8.409441E-03	148	4.819822E-03	201	2.762452E-03	254	1.583283E-03
45	.0142174	96	8.321585E-03	149	4.769467E-03	202	2.733592E-03	255	1.566742E-03
46	1.406887E-02	97	8.234648E-03	150	4.719639E-03	203	2.705033E-03	256	1.550373E-03
47	1.392189E-02	98	8.148618E-03	151	4.670332E-03	204	2.676773E-03	257	1.534177E-03
48	1.377644E-02	99	8.063488E-03	152	4.62154E-03	205	2.648808E-03	258	1.518149E-03
49	1.363251E-02	100	7.979246E-03	153	4.573258E-03	206	2.621135E-03	259	1.502288E-03
50	1.349009E-02	101	7.895885E-03	154	4.525479E-03	207	2.593752E-03	260	1.486593E-03
		102	7.813395E-03	155	4.478201E-03	208	2.566654E-03	261	1.471062E-03
		103	7.731766E-03	156	4.431416E-03	209	2.539839E-03	262	1.455694E-03

263	1.440486E-03
264	1.425437E-03
265	1.410545E-03
266	1.395808E-03
267	1.381226E-03
268	1.366796E-03
269	1.352517E-03
270	1.338387E-03
271	1.324404E-03
272	1.310568E-03
273	1.296876E-03
274	1.283327E-03
275	1.26992E-03
276	1.256653E-03
277	1.243524E-03
278	1.230533E-03
279	1.217677E-03
280	1.204955E-03
281	1.192367E-03
282	1.17991E-03
283	1.167583E-03
284	1.155385E-03
285	1.143314E-03
286	1.13137E-03
287	1.11955E-03
288	1.107854E-03
289	1.09628E-03
290	1.084827E-03
291	1.073493E-03
292	1.062278E-03
293	1.05118E-03
294	1.040198E-03
295	1.029331E-03
296	1.018577E-03
297	1.007936E-03
298	9.974058E-04
299	9.869856E-04
300	9.76674E-04
301	9.664707E-04
302	9.563735E-04
303	9.463821E-04
304	9.364948E-04
305	9.267112E-04
306	9.170295E-04
307	9.074491E-04
308	8.979686E-04
309	8.885874E-04
310	8.79304E-04
311	8.701179E-04
312	8.610274E-04
313	8.52032E-04
314	8.431305E-04
315	8.343222E-04
316	8.256058E-04
317	8.169804E-04
318	8.084453E-04
319	7.999992E-04
320	7.916415E-04
321	7.833708E-04
322	7.75187E-04
323	7.670881E-04
324	7.590741E-04
325	7.511438E-04
326	7.432967E-04
327	7.35531E-04
328	7.278469E-04
329	7.202428E-04
330	7.127184E-04
331	7.052722E-04
332	6.979042E-04
333	6.906129E-04
334	6.833981E-04
335	6.762581E-04
336	6.691931E-04
337	6.622018E-04
338	6.552838E-04
339	6.484378E-04
340	6.416634E-04
341	6.349598E-04
342	6.283261E-04
343	6.217619E-04
344	6.152661E-04
345	6.088384E-04
346	6.024776E-04
347	5.961834E-04
348	5.899548E-04
349	5.837915E-04
350	5.776923E-04
351	5.716572E-04
352	5.656848E-04
353	5.597751E-04
354	5.539268E-04
355	5.481399E-04
356	5.424132E-04
357	5.367465E-04
358	5.311389E-04
359	5.255901E-04
360	5.20099E-04
361	5.146655E-04
362	5.092885E-04
363	5.039679E-04
364	4.987028E-04
365	4.934928E-04

Maximum residue

1.467248E-02

Average residue

4.579767E-03

DAILY ACCUMULATED PESTICIDE RESIDUES—MULTP. APPL.

Chemical name ———— Myclobutanil-tomatoes
Initial concentration (ppm) —— 24
Half-life ———— 66
A number of application ——— 3
Application interval ——— 21
Length of simulation (day) —— 365

DAY	RESIDUE (PPM)
0	24
1	23.74927
2	23.50115
3	23.25563
4	23.01267
5	22.77225
6	22.53434
7	22.29892
8	22.06596
9	21.83543
10	21.60731
11	21.38157
12	21.15819
13	20.93715
14	20.71841
15	20.50196
16	20.28777
17	20.07582
18	19.86608
19	19.65853
20	19.45315
21	43.24992
22	42.79808
23	42.35095
24	41.9085
25	41.47067
26	41.03742
27	40.60869
28	40.18444
29	39.76462
30	39.34919
31	38.9381
32	38.5313
33	38.12875
34	37.73041
35	37.33623
36	36.94617
37	36.56019
38	36.17823
39	35.80026
40	35.42625
41	35.05614
42	58.6899
43	58.07675
44	57.47001
45	56.8696
46	56.27547
47	55.68755
48	55.10576
49	54.53006
50	53.96037
51	53.39662
52	52.83878
53	52.28676
54	51.7405
55	51.19996
56	50.66506
57	50.13574
58	49.61196
59	49.09366
60	48.58076
61	48.07322
62	47.57099
63	47.074
64	46.58221
65	46.09555
66	45.61398
67	45.13743
68	44.66587
69	44.19924
70	43.73748
71	43.28054
72	42.82837
73	42.38093
74	41.93817
75	41.50002
76	41.06646
77	40.63743
78	40.21288
79	39.79277
80	39.37704
81	38.96566
82	38.55857
83	38.15574
84	37.75712
85	37.36266
86	36.97232
87	36.58606
88	36.20384
89	35.8256
90	35.45133
91	35.08095
92	34.71446
93	34.35179
94	33.9929
95	33.63777
96	33.28634
97	32.93859
98	32.59448
99	32.25395
100	31.91698
101	31.58354
102	31.25358
103	30.92706
104	30.60396
105	30.28423
106	29.96784
107	29.65476
108	29.34495
109	29.03838
110	28.73501
111	28.4348
112	28.13773
113	27.84377
114	27.55288
115	27.26503
116	26.98018
117	26.69831
118	26.41939
119	26.14338
120	25.87025
121	25.59998
122	25.33253
123	25.06787
124	24.80598
125	24.54683
126	24.29038
127	24.03661
128	23.78549
129	23.537
130	23.2911
131	23.04777
132	22.80699
133	22.56872
134	22.33294
135	22.09962
136	21.86874
137	21.64027
138	21.41419
139	21.19047
140	20.96908
141	20.75001
142	20.53323
143	20.31871
144	20.10644
145	19.89638
146	19.68852
147	19.48283
148	19.27929
149	19.07787
150	18.87856
151	18.68133
152	18.48616
153	18.29303
154	18.10192
155	17.9128
156	17.72566
157	17.54048
158	17.35723
159	17.17589
160	16.99645
161	16.81888
162	16.64317
163	16.4693
164	16.29724
165	16.12697
166	15.95849
167	15.79177
168	15.62679
169	15.46353
170	15.30198
171	15.14212
172	14.98392
173	14.82738
174	14.67247
175	14.51919
176	14.3675
177	14.2174
178	14.06887
179	13.92189
180	13.77644
181	13.63251
182	13.49009
183	13.34916
184	13.20969
185	13.07169
186	12.93513
187	12.79999
188	12.66626
189	12.53394
190	12.40299
191	12.27341
192	12.14519
193	12.01831
194	11.89275
195	11.7685
196	11.64555
197	11.52389
198	11.40349
199	11.28436
200	11.16647
201	11.04981
202	10.93437
203	10.82013
204	10.70709
205	10.59523
206	10.48454
207	10.37501
208	10.26662
209	10.15936
210	10.05322
211	9.948191
212	9.844259
213	9.741413
214	9.639642
215	9.538935
216	9.439279
217	9.340662
218	9.243078
219	9.146514
220	9.050959
221	8.9564
222	8.86283
223	8.770237
224	8.678614
225	8.587945
226	8.498224
227	8.409441
228	8.321585
229	8.234648
230	8.148618
231	8.063486
232	7.979245
233	7.895884
234	7.813394
235	7.731765
236	7.650989
237	7.571058
238	7.49196
239	7.413689
240	7.336237
241	7.259593
242	7.18375
243	7.1087
244	7.034433
245	6.960943
246	6.88822
247	6.816257
248	6.745045
249	6.674577
250	6.604847
251	6.535844
252	6.467562
253	6.399994
254	6.333132
255	6.266968
256	6.201494
257	6.136707
258	6.072594
259	6.009153

260	5.946372
261	5.88425
262	5.822775
263	5.761943
264	5.701746
265	5.642179
266	5.583233
267	5.524904
268	5.467183
269	5.410066
270	5.353546
271	5.297615
272	5.242271
273	5.187503
274	5.133308
275	5.079678
276	5.026611
277	4.974096
278	4.92213
279	4.870707
280	4.819822
281	4.769467
282	4.719639
283	4.670331
284	4.62154
285	4.573257
286	4.525479
287	4.478199
288	4.431415
289	4.385119
290	4.339306
291	4.293972
292	4.249112
293	4.204721
294	4.160793
295	4.117324
296	4.074309
297	4.031744
298	3.989623
299	3.947943
300	3.906696
301	3.865883
302	3.825494
303	3.785529
304	3.745979
305	3.706845
306	3.668118
307	3.629797
308	3.591874
309	3.55435
310	3.517216
311	3.480471
312	3.44411
313	3.408128
314	3.372522
315	3.337289
316	3.302423
317	3.267922
318	3.233781
319	3.199997
320	3.166566
321	3.133483
322	3.100748
323	3.068352
324	3.036297
325	3.004575
326	2.973187
327	2.942124
328	2.911388
329	2.880971
330	2.850874
331	2.821089
332	2.791617
333	2.762451
334	2.733592
335	2.705032
336	2.676773
337	2.648807
338	2.621135
339	2.593751
340	2.566653
341	2.539839
342	2.513305
343	2.487048
344	2.461064
345	2.435353
346	2.40991
347	2.384734
348	2.359819
349	2.335166
350	2.310769
351	2.286629
352	2.262739
353	2.2391
354	2.215707
355	2.19256
356	2.169653
357	2.146986
358	2.124556
359	2.10236
360	2.080396
361	2.058662
362	2.037154
363	2.015872
364	1.994811
365	1.973971

Maximum residue
---------- 58.6899
Average residue

18.31906