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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 *Anthony F. Maciorowski*
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	3.19997E-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	328	7.278469E-04
264	1.425437E-03	329	7.202428E-04
265	1.410545E-03	330	7.127184E-04
266	1.395808E-03	331	7.052722E-04
267	1.381226E-03	332	6.979042E-04
268	1.366796E-03	333	6.906129E-04
269	1.352517E-03	334	6.833981E-04
270	1.338387E-03	335	6.762581E-04
271	1.324404E-03	336	6.691931E-04
272	1.310568E-03	337	6.622018E-04
273	1.296876E-03	338	6.552838E-04
274	1.283327E-03	339	6.484378E-04
275	1.26992E-03	340	6.416634E-04
276	1.256653E-03	341	6.349598E-04
277	1.243524E-03	342	6.283261E-04
278	1.230533E-03	343	6.217619E-04
279	1.217677E-03	344	6.152661E-04
280	1.204955E-03	345	6.088384E-04
281	1.192367E-03	346	6.024776E-04
282	1.17991E-03	347	5.961834E-04
283	1.167583E-03	348	5.899548E-04
284	1.155385E-03	349	5.837915E-04
285	1.143314E-03	350	5.776923E-04
286	1.13137E-03	351	5.716572E-04
287	1.11955E-03	352	5.656848E-04
288	1.107854E-03	353	5.597751E-04
289	1.09628E-03	354	5.539268E-04
290	1.084827E-03	355	5.481399E-04
291	1.073493E-03	356	5.424132E-04
292	1.062278E-03	357	5.367465E-04
293	1.05118E-03	358	5.311389E-04
294	1.040198E-03	359	5.255901E-04
295	1.029331E-03	360	5.20099E-04
296	1.018577E-03	361	5.146655E-04
297	1.007936E-03	362	5.092885E-04
298	9.974058E-04	363	5.039679E-04
299	9.869856E-04	364	4.987028E-04
300	9.76674E-04	365	4.934928E-04
301	9.664707E-04		Maximum residue
302	9.563735E-04		-----
303	9.463821E-04		1.467248E-02
304	9.364948E-04		Average residue
305	9.267112E-04		-----
306	9.170295E-04		4.579767E-03
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		

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	48	55.10576	101	31.58354	154	18.10192	207	10.37501
0	24	49	54.53006	102	31.25358	155	17.9128	208	10.26662
1	23.74927	50	53.96037	103	30.92706	156	17.72566	209	10.15936
2	23.50115	51	53.39662	104	30.60396	157	17.54048	210	10.05322
3	23.25563	52	52.83878	105	30.28423	158	17.35723	211	9.948191
4	23.01267	53	52.28676	106	29.96784	159	17.17589	212	9.844259
5	22.77225	54	51.7405	107	29.65476	160	16.99645	213	9.741413
6	22.53434	55	51.19996	108	29.34495	161	16.81888	214	9.639642
7	22.29892	56	50.66506	109	29.03838	162	16.64317	215	9.538935
8	22.06596	57	50.13574	110	28.73501	163	16.4693	216	9.439279
9	21.83543	58	49.61196	111	28.4348	164	16.29724	217	9.340662
10	21.60731	59	49.09366	112	28.13773	165	16.12697	218	9.243078
11	21.38157	60	48.58076	113	27.84377	166	15.95849	219	9.146514
12	21.15819	61	48.07322	114	27.55288	167	15.79177	220	9.050959
13	20.93715	62	47.57099	115	27.26503	168	15.62679	221	8.9564
14	20.71841	63	47.074	116	26.98018	169	15.46353	222	8.86283
15	20.50196	64	46.58221	117	26.69831	170	15.30198	223	8.770237
16	20.28777	65	46.09555	118	26.41939	171	15.14212	224	8.678614
17	20.07582	66	45.61398	119	26.14338	172	14.98392	225	8.587945
18	19.86608	67	45.13743	120	25.87025	173	14.82738	226	8.498224
19	19.65853	68	44.66587	121	25.59998	174	14.67247	227	8.409441
20	19.45315	69	44.19924	122	25.33253	175	14.51919	228	8.321585
21	19.24992	70	43.73748	123	25.06787	176	14.3675	229	8.234648
22	19.047067	71	43.28054	124	24.80598	177	14.2174	230	8.148618
23	18.8444	72	42.82837	125	24.54683	178	14.06887	231	8.063486
24	18.6417	73	42.38093	126	24.29038	179	13.92189	232	7.979245
25	18.43919	74	41.93817	127	24.03661	180	13.77644	233	7.895884
26	18.23623	75	41.50002	128	23.78549	181	13.63251	234	7.813394
27	18.03362	76	41.06646	129	23.537	182	13.49009	235	7.731765
28	17.8313	77	40.63743	130	23.2911	183	13.34916	236	7.650989
29	17.62875	78	40.21288	131	23.04777	184	13.20969	237	7.571058
30	17.42625	79	39.79277	132	22.80699	185	13.07169	238	7.49196
31	17.22375	80	39.37704	133	22.56872	186	12.93513	239	7.413689
32	17.02125	81	38.96566	134	22.33294	187	12.79999	240	7.336237
33	16.81875	82	38.55857	135	22.09962	188	12.66626	241	7.259593
34	16.61625	83	38.15574	136	21.86874	189	12.53394	242	7.18375
35	16.41375	84	37.75712	137	21.64027	190	12.40299	243	7.1087
36	16.21125	85	37.36266	138	21.41419	191	12.27341	244	7.034433
37	16.00875	86	36.97232	139	21.19047	192	12.14519	245	6.960943
38	15.80625	87	36.58606	140	20.96908	193	12.01831	246	6.88822
39	15.60375	88	36.20384	141	20.75001	194	11.89275	247	6.816257
40	15.40125	89	35.8256	142	20.53323	195	11.7685	248	6.745045
41	15.19875	90	35.45133	143	20.31871	196	11.64555	249	6.674577
42	14.99625	91	35.08095	144	20.10644	197	11.52389	250	6.604847
43	14.79375	92	34.71446	145	19.89638	198	11.40349	251	6.535844
44	14.59125	93	34.35179	146	19.68852	199	11.28436	252	6.467562
45	14.38875	94	33.9929	147	19.48283	200	11.16647	253	6.399994
46	14.18625	95	33.63777	148	19.27929	201	11.04981	254	6.333132
47	13.98375	96	33.28634	149	19.07787	202	10.93437	255	6.266968
		97	32.93859	150	18.87856	203	10.82013	256	6.201494
		98	32.59448	151	18.68133	204	10.70709	257	6.136707
		99	32.25395	152	18.48616	205	10.59523	258	6.072594
		100	31.91698	153	18.29303	206	10.48454	259	6.009153

260	5.946372	325	3.004575
261	5.88425	326	2.973187
262	5.822775	327	2.942124
263	5.761943	328	2.911388
264	5.701746	329	2.880971
265	5.642179	330	2.850874
266	5.583233	331	2.821089
267	5.524904	332	2.791617
268	5.467183	333	2.762451
269	5.410066	334	2.733592
270	5.353546	335	2.705032
271	5.297615	336	2.676773
272	5.242271	337	2.648807
273	5.187503	338	2.621135
274	5.133308	339	2.593751
275	5.079678	340	2.566653
276	5.026611	341	2.539839
277	4.974096	342	2.513305
278	4.92213	343	2.487048
279	4.870707	344	2.461064
280	4.819822	345	2.435353
281	4.769467	346	2.40991
282	4.719639	347	2.384734
283	4.670331	348	2.359819
284	4.62154	349	2.335166
285	4.573257	350	2.310769
286	4.525479	351	2.286629
287	4.478199	352	2.262739
288	4.431415	353	2.2391
289	4.385119	354	2.215707
290	4.339306	355	2.19256
291	4.293972	356	2.169653
292	4.249112	357	2.146986
293	4.204721	358	2.124556
294	4.160793	359	2.10236
295	4.117324	360	2.080396
296	4.074309	361	2.058662
297	4.031744	362	2.037154
298	3.989623	363	2.015872
299	3.947943	364	1.994811
300	3.906696	365	1.973971
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		

Maximum residue
 ----- 58.6899
 Average residue

 18.31906