Memorandum

002327

Date: 7 December 1982

Subject: EPA Reg. No. 3125-214 BAYGON 1.5
Caswell #508

From: B. T. Backus
IRB/TSS

To: Mr. Jay Ellenberger
Product Manager 12

Registrant: Agric. Division
Mobay Chemical Corp.
P.O. Box 4913
Kansas City, MO 64120

Active Ingredient:
2-(1-Methylethoxy)phenol methylcarbamate.....14.7%
Inert Ingredients.....85.3%

Background:

The registrant has sent in acute oral LD50, acute dermal LD50, acute inhalation LC50, primary dermal and eye irritation studies on this formulation.

Comments and Recommendations:

1. The acute oral LD50, acute dermal LD50, acute inhalation LC50, and primary dermal and eye irritation studies received 10-20-82 are acceptable.

2. No revisions are recommended in the precautionary and practical treatment statements of the draft labeling dated 7/18/78.

Review:

The following studies were conducted on the registered product by the Mobay Chemical Corp., Chemagro Agricultural Division, Box 4913-Hawthorn Rd., Kansas City, MO 64120. Studies were received at EPA 10-20-82 and are in Acc. 248579.

1. Acute Oral LD50 - Rat. Report No. 54108, Document No. AS 82-2297; dated Nov. 18, 1977 with revision of April 24, 1978.

Procedure: Groups of 10M received dosages of 220, 323, 475 or 698 mg/kg, while groups of 10F received dosages of 102, 150, 220 or 323 mg/kg, with subsequent 14-day observation.

Results:

Dosage Level (mg/kg)	Mortalities/Animals Dosed M	F
102	-	0/10
150	-	5/10
220	0/10	7/10
323	4/10	10/10
475	4/10	-
698	10/10	-

Oral LD50 (M) = 436 (354-538) mg/kg
Oral LD50 (F) = 168 (141-200) mg/kg

Symptoms: fasciculations, hypoactivity, salivation and diarrhea. Necropsies of mortalities and sacrificed rats showed most had congested lungs and livers. All deaths reported as occurring within 24 hrs of dosage.

Study Classification: Core Minimum Data (no individual necropsy or observational data).
Product Classification: Tox. Cat.II

2. Acute Dermal LD50 - Rabbit. Report No. 54369, Document No. AS 82-2299; dated Jan. 11, 1978.

Procedure: 4M, 4F received 24-hr occluded dermal exposure to a dosage of 5 g/kg, with subsequent 14-day observation.

Results: 1F died within one hour after showing signs of salivation and fasciculations. One male had fasciculations at 24 hrs. Lethargy present for several days after exposure. Necropsy findings were nonspecific and not considered related to exposure. Dermal LD50 above 5 g/kg.

Study Classification: Core Minimum Data

Product Classification: Tox. Cat. IV

3. Acute Inhalation LC50 - Rat. Report No. 54142; Document No. AS 82-2298; dated Nov. 4, 1977 with revised date of April 21, 1978.

Procedure: Groups of 10M, 10F were exposed for 1 hr to analytically measured concentrations of 0.915, 3.132, 5,542 and 7.9 mg/L. Droplet sizes were under 10 mμ, with most (86%+) under 0.98 mμ. Subjects were observed for 14 days following exposure.

Results:

Exposure Level (mg/L) Nominal	Measured	Mortalities/Animals Exposed M	F
20	0.915	0/10	0/10
20	3.132	2/10	1/10
50	5.542	3/10	4/10
75	7.9	9/10	8/10

LC50 (M) = 4.9 (3.5-6.8) mg/L
LC50 (F) = 5.4 (3.3-7.7) mg/L

Study Classification: Core Minimum Data

Product Classification: Tox. Cat. III

4. Primary Dermal Irritation - Rabbit. Report No. 54379; Document No. AS 82-2300; dated Dec. 28, 1977.

   Procedure: 6 NZ white rabbits received 24-hr occluded dermal exposure to 0.5 ml of test compound applied at both an intact and abraded site.

   Results: No irritation seen. PDIS = 0.0.

   Study Classification: Core Minimum Data

   Product Classification: Tox. Cat. IV

5. Primary Eye Irritation - Rabbit. Report No. 54379; Document No. As 82-2300; dated Dec. 28, 1977.

   Procedure: 0.1 ml was placed in one eye of each of 9 rabbits; 3 eyes were washed out with water 45 seconds after exposure. Remaining 6 eyes were unwashed.

   Results: Some corneal opacity seen in all rabbits. Some irritation present in 5/6 unwashed, 2/3 washed eyes on day 7. 5/6 unwashed, 1/3 washed eyes clear by day 14. One unwashed eye had minimal (area = 1, opacity = 1) corneal involvement on day 21; all others had cleared.

   Study Classification: Core Minimum Data

   Product Classification: Tox. Cat. II

Byron T Backus 12/07/82

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