April 15, 1998

MEMORANDUM

Subject: Cyromazine. Conclusions of the Metabolism Assessment Review Committee at

Meeting of 11/04/97. Chemical No. 121301. DP Barcode D245214.

FROM: Jerry B. Stokes, Chemist

Chemistry and Exposure Branch 2 Health Effects Division (7509C)

Stephen Dapson, Toxicologist

Toxicology Branch 2

Health Effects Division (7509C)

THRU: Susan Hummel, Branch Senior Scientist

Chemistry and Exposure Branch 2 Health Effects Division (7509C)

Richard Loranger, Chairperson

Metabolism Assessment Review Committee

Health Effects Division (7509C)

TO: George Kramer, Exec. Sec.

Metabolism Assessment Review Committee

Health Effects Division (7509C)

Material Reviewed/Conclusions:

The Committee discussed the results of metabolism studies and other data for cyromazine and its metabolite melamine as delineated in the J. Stokes briefing memorandum dated 10/30/97 and determined the following:

Melamine has been removed by the World Health Organization as a residue of concern for cyromazine, and Codex limits are established for the parent cyromazine only. Cyromazine is

classified by the Agency as a group "E" carcinogen (no evidence of carcinogenicity) with a RfD of 0.01 mg/kg/day (with an UF of 100 using a NOEL of 0.75 mg/kg/day and a LOEL of 7.5 mg/kg/day from the 6 month dog study). Melamine does not show similar hematological effects. Melamine produced bladder tumors (in the male rat urinary bladder), at a threshold effect >10,000 ppm in the diet. These tumors were due to the accumulation of stones (hard crystalline solids) which caused irritation and secondarily resulted in the formation of tumors; therefore, melamine is not considered to be a direct carcinogen by the Agency. Melamine is a chemical intermediate in the manufacture of amino resins and plastics as well as a contaminant and/or a metabolite of several pesticides, but is not regulated as a pesticide.

The Committee has determined that based on the data the current tolerance expression for cyromazine should be for parent only. Melamine should be removed as a residue of toxicological concern.

Groundwater monitoring data for cyromazine only is available from the state of Wisconsin. In addition, the Committee has stated that it will review the need to include a ruminant metabolite (N-methyl cyromazine, found in the ruminant metabolic study), when a future proposed use on a specific crop involves a ruminant feedstuff.

cc: J. Stokes (CEB2); S. Dapson (TOX2); Metabolism Assessment Review Committee F.(Chem. Files); Cyromazine S.F.; R.F.; A. Rathman (RAB1)

RDI:SHummel:04/14/98

7509C:CEB2:CM#2:Rm803:305-7561:JStokes:04/15/98