MEMORANDUM

Subject: Metsulfuron Methyl and Tribenuron Methyl, Registrant Response to DCI for Hexachlorobenzene and Pentachlorobenzene; Resubmission of Waiver Request. DP Barcode: D187508. MRID No. None. CBRS No. 11299.

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Through: Andrew Rathman, Section Head Special Review Section I Chemistry Branch II - Reregistration Support Health Effects Division (H7509C)

To: Dennis Utterback Special Review Branch Special Review and Reregistration Division (H7508)

In response to a Data Call-In for analytical chemistry data on hexachlorobenzene (HCB) and pentachlorobenzene (PCB) in certain pesticides, DuPont Agricultural Products previously responded with a waiver request for metsulfuron methyl (40CFR180.428), tribenuron methyl (40CFR180.451), thifensulfuron methyl (40CFR180.439), and cyanazine (40CFR180.307). The request included a description of the manufacturing process of each of the chemicals and discussions of the lack of potential for HCB formation. It was concluded that HCB/PCB could be present in the starting s-triazine used in the manufacture of metsulfuron methyl, tribenuron methyl, thifensulfuron methyl, and cyanazine. Therefore, the subject pesticides are subject to the DCI requirements, and a waiver was deemed inappropriate (S. Funk, CBRS No. 10897, 12/18/92).

The registrant has responded in a letter of 01/25/92 from Richard Davis, Research Associate, DuPont Agricultural Products, to D. Utterback, SRRD. The registrant is requesting a reconsideration of
the waiver request for metsulfuron methyl and tribenuron methyl. For these two pesticides, the registrant claims that the starting s-triazine is not made by the procedure associated with HCB/PCB contamination. The manufacture of the s-triazines for metsulfuron methyl and tribenuron methyl is presented. The registrant claims CBI status for the information submitted.

Conclusions

The reagents and conditions requisite for the formation of PCB/HCB in the starting s-triazines for the manufacture of metsulfuron methyl and methyl tribenuron are absent. These s-triazines are not manufactured via cyanuric chloride or any chlorinated s-triazine. It was previously concluded that conversion of the s-triazines to the final pesticides under the reaction schemes described by the registrant were unlikely to produce any PCB/HCB beyond that present in the starting s-triazines (S. Funk, CBRS NO. 10897, 12/18/92). Therefore, it is concluded that the formation of PCB/HCB as a contaminant in the manufacture of metsulfuron methyl and methyl tribenuron is unlikely. Metsulfuron methyl and methyl tribenuron should be exempted from the data call-in for analytical chemistry data hexachlorobenzene (HCB) and pentachlorobenzene (PCB) in these pesticides. The DCI continues to apply to thifensulfuron methyl and cyanazine.

Recommendation

CBRS recommends that DuPont be granted a waiver from the requirements of the HCB/PCB DCI for technical metsulfuron methyl and technical methyl tribenuron. The granting of waivers is in the purview of SRRD.

Detailed Considerations

The starting s-triazine (A4098) for the manufacture of metsulfuron methyl is produced through a series of reactions at relatively low temperature and in the absence of chlorine, cyanogen chloride, cyanuric chloride, and aromatic solvents. The probability of forming any chlorinated benzene contaminant is extremely low.

The starting s-triazine (L5296) for the manufacture of tribenuron methyl is produced through a series of reactions at relatively low temperature and in the absence of chlorine, cyanogen chloride, and cyanuric chloride. An aromatic solvent is used, but conditions and reagents required to chlorinate the solvent are absent. The probability of forming any chlorinated benzene contaminant is extremely low.

See Confidential Appendix A for details.
Pages 4-6 Manufacturing process information may be entitled to confidential treatment