



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

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

JAN 24 1991

MEMORANDUM:

Subject: Product Chemistry Review on
Select 2EC Herbicide

EPA File Symbol: 59639-G

From: Radamés Lozada, Chemist
Product Chemistry Review Section
Registration Support Branch
Registration Division (H7505C)

To: Joanne I. Miller, Acting PM 23
Fungicide-Herbicide Branch
Registration Division (H7505C)

Thru: Donald Stubbs, Acting Section Head
Product Chemistry Review Section
Registration Support Branch
Registration Division (H7505C)

Registrant: Valent USA Corporation

EPA File Symbol: 59639-G

Pesticide Chemical Code: 129009-7

CAS Registry No.: 99129-21-2

Product Name: Select 2EC Herbicide

Chemical Name: (E)-2-[1-(((3-chloro-2-propenyl)oxy)imino)-propyl]-
5-[2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one

Common/Trade Name: clethodim

MRID No(s): 416566-01, -02

Use: herbicide

Introduction:

This submission (from Valent USA Corporation dated October 25 1990) is for Select 2EC Herbicide, an end-use product (EP), which contains the active ingredient (E)-2-[1-(((3-chloro-2-propenyl)oxy)imino)-propyl]-5-[2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one. This submission proposes an amendment to the registration application to also allow packaging of this EP in plastic containers, specifically high-density polyethylene and post-fluorine treated high-density polyethylene containers.

The product chemistry data for Select 2EC Herbicide and Clethodim Technical (EPA File Symbol: 59639-E) was previously reviewed by Radamés Lozada of Registration Support Branch, Registration Division on September 28, 1989. The same data (MRID Nos. 409745-01 thru -05) was also reviewed later by Dynamac Corporation under supervision of Maxie Jo Nelson of Dietary Exposure Branch (DEB) on March 12, 1990. The registrant has not yet addressed the deficiencies found in both reviews.

This review will address the submitted data as it relates to the product chemistry data requirements.

Series 61: Product Identity and Disclosure of Ingredients:

Registrant's Discussion

The registrant states that there is not expected migration of packaging materials into the product. Material Safety Data Sheets for Marlex[®] resin, the material utilized to manufacture the packaging materials were submitted and can be found in MRID 416566-01.

Reviewer's Comments:

The submitted data is acceptable. No additional data is required for this topic.

Series 63: Physical and Chemical Characteristics:

Registrant's Discussion

§ 63-17 Storage Stability

in High density polyethylene:	4.2% degradation after one year.
in Post-fluorine treated High density polyethylene	2.9% degradation after one year

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§ 63-20 Corrosion Characteristic:

Not corrosive to high density polyethylene after 2.5 years. Not corrosive to post-fluorine treated high density polyethylene after 1.8 years.

Reviewer's Comments:

The registrant submitted the data and the methodology to support these results and can be found in MRID # 416566-02 pages 7-13.

The submitted data is acceptable. No additional data is required for this topic.

Conclusions and Recommendations:

The proposed amendment to the registration application to also allow packaging of Select 2EC Herbicide in plastic containers is acceptable. No further information is needed for this purpose.

The deficiencies found in the previously mentioned reviews associated with the product chemistry data of Clethodim Technical and Select 2EC Herbicide continue unresolved and remain outstanding.

We strongly recommend that Select 2EC Herbicide not be registered until the technical product is registered and the deficiencies of the EP are addressed and reviewed.

Note to PM: The previous review done by Radamés Lozada on September 28, 1989 is missing from the jacket. A copy of the review can be obtained from the PCRS's files.

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