SUBJECT; Product Chemistry Review of CGA-163935 Technical(EPA

ID No. 100-EUP-OE)

FROM; Alfred Smith, Chemist

Product Chemistry Review Section

Registration Support Branch Registration Division (H7505C)

TO; Steven Robbins, PM Team 23

Fungicide-Herbicide Branch Registration Division (H7505C)

APPLICANT; CIBA - GEIGY Corporation

EPA ID No: 100-EUP-OE

MRID NOS: 416042-01, -02, -03, -04

CAS No: 95266-40-3

CHEMICAL NAME; 4-(Cyclopropyl-alpha-hydroxymethylene)-3,5-dioxocyclohexanecarboxylic acid ethyl ester

PRODUCT NAME; CGA-163935 Technical

USE: Plant Growth Regulator

INTRODUCTION

CIBA-GEIGY's submission of July 10, 1990 contains a request for an experimental use permit to conduct limited experimental field trials with a new chemical CGA-163935 as active ingredient (ai) in the technical product (TGAI) and the end use product (EP) Primo/Vision Turf Growth Regulator. Product chemistry data are submitted to support the requirements of 40 CFR 158.150 for the TGAI and the EP.

PRODUCT IDENTITY AND COMPOSITION (MRID No. 416042-01)

61-1: Product Identity and Disclosure of Ingredients

For a discussion of the product identity of the ai CGA-163935, see Confidential Appendix A. A Confidential Statement of Formula(CSF, EPA Form 8570-4) which contains the composition of the TGAI is discussed in Confidential Appendix B.

The data satisfy the requirements of 40 CFR 158.155 (Guidelines Reference Number, GRN, 61-1). No additional data are needed.

61-2: Beginning Materials and Manufacturing Process

See Confidential Appendix A for discussion of beginning materials and manufacturing process.

The data satisfy the requirements of 40 CFR 158.160-162(GRN 61-2). No additional data are needed.

61-3: DISCUSSION OF THE FORMATION OF IMPURITIES

See Confidential Appendix A for a discussion of the formation of impurities.

The data satisfy the requirements of 40 CFR 158.167(GRN 61-3). No additional data are needed.

ANALYSIS AND CERTIFICATION OF PRODUCT INGREDIENTS (MRID No.416042-02)

62-1: Preliminary Analysis

Five samples of the technical CGA-163935 were examined for the ai and its impurities. A discussion of the results and the analytical methods used are included in Confidential Appendix B.

The data satisfy the requirements of 40 CFR 158.170(GRN 62-1). No additional data are needed.

62-2: Certified Limits

The certified limits are contained in the CSF and are discussed in Confidential Appendix B.

The data satisfy the requirements of $40\ \text{CFR}\ 158.175(\text{GRN}\ 62-2)$. No additional data are needed.

62-3: Enforcement Analytical Methods

Adequate enforcement methods are submitted and discussed in Confidential Appendix B under section 62-1(Preliminary Analysis). No additional data are needed.

PHYSICAL AND CHEMICAL CHARACTERISTICS

The physicochemical properties of CGA-163935 Technical (TGAI) are summarized below (MRID No. 416042-03).

GRN	Property	<u>Description</u>
63-2	Color	Yellow to red-brown
63-3	Physical State	Liquid or Crystals
63-4	Odor	Slightly sweet
63-6	Boiling Point	>270 degrees
63-7	Density	1.215 g/ml at 20 degrees C
63-8	Solubility	g/100 ml): water, 0.28- 2.11
		at pH 4.9 -8.2; acetone,
		100; ethanol, 100; toluene,
		100; n-hexane, 5.0; n-
		octanol, 100
63-9	Vapor Pressure	1.62x10(-5)mm Hg at 25
		degrees C
63-10	Dissociation Constant	4.57
63-11	Octanol/Water Partition	Log P = 2.44; $Kow = 275$
	Coefficient	
63-12	рH	3.3 at 20 degrees C(1%
		solution in water)
63-13	Stability	Work in progress
	-	*

The data satisfy the requirements of 40 CFR 158.190 except GRN 63-13 for which work is in progress.

SUMMARY OF DEFICIENCIES

The Applicant reports that work is in progress for the stability data(GRN 63-13). Presumeably the study will be forwarded to the Agency when completed.



ATTACHMENTS; Confidential Attachments A and B

	is not included in this copy. s $\frac{4}{}$ through $\frac{13}{}$ are not included in this copy.
The i	material not included contains the following type of rmation:
	_ Identity of product inert ingredients.
<u> </u>	Identity of product impurities.
<u>/</u>	Description of the product manufacturing process.
<u></u>	Description of quality control procedures.
	Identity of the source of product ingredients.
	Sales or other commercial/financial information.
	A draft product label.
· · · · · · · · · · · · · · · · · · ·	The product confidential statement of formula.
	Information about a pending registration action.
	FIFRA registration data.
	The document is a duplicate of page(s)
	The document is not responsive to the request.
Pro	formation not included is generally considered confidentia duct registrants. If you have any questions, please t the individual who prepared the response to your request