

US EPA ARCHIVE DOCUMENT

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Update Propazine

**OPP OFFICIAL RECORD
HEALTH EFFECTS DIVISION
SCIENTIFIC DATA REVIEWS
EPA SERIES 361**

Acceptable Name: Propazine

Pesticide Reg. Sec. 180.243

Structure: See original entry

Other names: 2-chloro-4,6-bis(isopropylamino)-s-triazine, Milogard, Gesamil, Primatol P, Milocep, G-30028
CAS 139-40-2

Petitioner: Ciba-Geigy Corporation, Greensboro, N.C. 27409

Method A: Change Method A to Method II - See Simazine Method II, add pecans, sorghum

Method B: Change Method B to Method I - See Simazine Method I

Method III: See Simazine Method III

→ Method IV: AG-281 "Determination of 2,4-diamino-6-chloro-s-triazine (G-28273) Residues in Crops and Animal Tissue by Gas Chromatography" 3/5/75
(This method is for the metabolite common to atrazine, propazine and simazine.)

Pesticide Petition: PP2F2618

Product application: all crops, animal tissue

Detection limit: 0.1 ppm

Method trial report: MTO Report dated 9/20/83 and Reviewer's comments dated 10/7/83.

ANALYTICAL CHEMISTRY DEPARTMENT

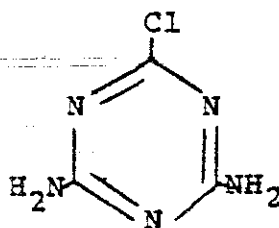
ARDSLEY, N.Y.

PAGE 1 of 15	METHOD No. AG-281	SUBJECT DETERMINATION OF 2,4-DIAMINO-6-CHLORO-s-TRIAZINE (G-28273) RESIDUES IN CROPS AND ANIMAL TISSUE BY GAS CHROMATOGRAPHY
EDITION 3/5/75		
SUBMITTED BY: M. W. Cheung		

APPROVED BY:


1.0 SCOPE

This method describes the procedure for determining residues of G-28273 (2,4-diamino-6-chloro-s-triazine) in or on crops and animal tissue resulting from the application of chloro-s-triazine herbicides. The limit of sensitivity is 0.10 ppm.



G-28273

2.0 PRINCIPLE

G-28273 residues in crops or animal tissue are extracted by blending the finely chopped crop material or animal tissue with a methanol/water mixture. The methanol/water extract from animal tissue is further washed with n-hexane to remove oily materials. The methanol/water extract is then taken to dryness. G-28273 is then separated from the majority of crop and animal tissue co-extractives by liquid-liquid partition chromatography using a pH 7.0 buffer as the stationary phase and hexane-ether mixtures as the mobile phases. The G-28273 is finally eluted from the column with ethyl ether. G-28273 is quantitated by a gas chromatograph equipped with a Dohrmann microcoulometric detector in the chloride-specific mode or a Coulson electrolytic conductivity detector in the nitrogen-specific mode.

3.0 REAGENTS

- | | |
|---------------------------|--------------------|
| 3.1 <u>Methanol:</u> | Absolute, reagent |
| 3.2 <u>Hexane:</u> | Practical |
| 3.3 <u>Ethyl Ether:</u> | Anhydrous, reagent |
| 3.4 <u>Ethyl Alcohol:</u> | Absolute, reagent |

CIBA-GEIGY Corporation



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

OCT 7 1983

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

Subject: PP 2F2618. Propazine on sorghum. Method Trial Results.

From: Martha J. Bradley, Chemist
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

Martha J. Bradley

Thru: Charles L. Trichilo, Chief
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

To: Robert Taylor, PM 25
Registration Division (TS-767)

and

Toxicology Branch
Hazard Evaluation Division (TS-769)

The results of the method trial for the metabolite 2,4-diamino-6-chloro-s-triazine (G-28273) in sorghum grain and beef liver have been reported.

Recoveries from sorghum grain at 0.1 and 0.2 ppm were 80% and from beef liver were 74 and 79% at the same fortification levels.

The method was conducted as written for sorghum, however, the sample size for liver was reduced to allow for faster cleanup. Difficulty was experienced in getting the proper separation using the liquid-liquid column chromatography. Practice in packing the column resulted in successful separation in a reasonable time. The GC column packing was also changed to HiEf on 100/120 Gas Chrom Q because the original column degraded too rapidly at the required operating temperature.

We conclude that an adequate method is available for the determination of the G-28273 metabolite of the S-triazines.

The remaining deficiency in this petition is the submission of a food additive tolerance proposal for 6 ppm on sweet sorghum syrup.

Recommendation

We recommend for the proposed tolerances provided the petitioner submits the appropriate food additive tolerance proposal for sweet sorghum syrup and provided TOX concurs.

cc: R.F., MJBradley, TOX, PP#2F2618, Circ., FDA
RDI:Section Head:RSQuick>Date:10/5/83:RDSchmitt>Date:10/5/83
TS-769:RCB:MJBradley:MJB:557-7377:CM#2:RM:810:



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

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

September 20, 1983

MEMORANDUM

TO: Martha J. Bradley, Chemist
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

THRU: Warren R. Bontoyan, Section Head *WRB*
Analytical Chemistry Laboratory
Chemical Operations Branch (TS-768)

THRU: Donald A. Marlow, Chief *DM*
Chemical Operations Branch (TS-768C)

SUBJECT: PP 2F2618 Propazine on Sorghum Method Trial For The
Analysis of Metabolite G-28273 (2,4-diamino-6-chloro-
s-triazine) Fortified, in Duplicate, in Both
Sorghum Grain and Beef Liver

Chemical Operations Branch was requested by Residue Chemistry Branch, Hazard Evaluation Division, to conduct a method trial on the propazine metabolite 2,4-diamino-6-chloro-s-triazine. Propazine is a product of CIBA-Geigy Corporation.

The procedure to be used was petitioners method AG-281 entitled "Determination of 2,4-Diamino-6-Chloro-s-Triazine (G-28273) Residues in Crops and Animal Tissue by Gas Chromatography", and dated 3-5-75. Fortification of sorghum and beef liver at 0, 0.1 and 0.2 ppm was to be completed.

For sorghum and beef liver the method calls for a methanol/water (90/10) extraction followed by an aliquot sampling of the resultant extract. The extract is washed with hexane and the methanol/water phase remaining is taken to dryness. G-28273 is then separated from the majority of crop and animal tissue co-extractives by liquid-liquid partition column chromatography using a pH 7.0 buffer (McIlvaines Buffer) supported on Hyflo-Super-Cel as the stationary phase. Hexane, hexane-ethyl ether,

Table I

Method Trial - Propazine Metabolite G-28273

(2,4-Diamino-6-Chloro-s-Triazine)

Commodity	Fortification (ppm)	Recovery %
Sorghum	0	ND
	0	ND
	0.1	79
	0.1	80
	0.2	87
	0.2	74
Beef Liver	0	ND
	0	ND
	0.1	76
	0.1	71
	0.2	80
	0.2	78

End
Of
Document

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Pages 8 through 18 are not included in this copy.

The material not included contains the following type of information:

- Identity of product inert ingredients.
- Identity of product impurities.
- Description of the product manufacturing process.
- 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.
- Internal deliberative information.
- Attorney-Client work product.
- Claimed Confidential by submitter upon submission to the Agency.

The information not included is generally considered confidential by product registrants. If you have any questions, please contact the individual who prepared the response to your request.



13544

R102953

Chemical:	Propazine
PC Code:	080808
HED File Code	11500 Petition Files Chemistry
Memo Date:	10/21/2004
File ID:	00000000
Accession Number:	412-05-0040

HED Records Reference Center
10/29/2004