



**ALCO  
CHEMICAL**

a division of National Starch and Chemical Company

4-PP

CONTAINS NO CBT

92 SEP -2 AM 7:48

CERTIFIED  
RETURN RECEIPT REQUESTED

FYI - OTS - 0992 - 0862

August 26, 1992

RECEIVED  
9/23/92

TOB/ACB

SEQUENCE A

8492000062

Attention: F.Y.I. Coordinator  
Document Processing Center TS-790  
Office of Toxic Substances  
United States Environmental Protection Agency  
401 M Street, S.W.  
Washington, D.C. 20460



84920000062

Re: TSCA SECTION 8(e) SUBMISSION  
Preliminary Results From the Nabam 21-Day Subchronic Dermal  
Toxicity Study With AQUATREAT® DN-30 in Rats (Guideline #82-2)

AQUATREAT® DN-30 (approximately 30% (w/w) nabam in water is  
manufactured by Alco Chemical Division of National Starch and  
Chemical Company and is sold only for FIFRA regulated uses. This  
chemical substance is on the TSCA Inventory C.A.S. No. 142-59-6.

We wish to inform EPA of results seen in the Nabam 21-Day  
Subchronic Dermal Toxicity Study. These results are being reported  
to EPA under FIFRA Section 6(a)(2). Attached is a draft copy of  
this communication. Please refer to this letter for a description  
of the results observed during the conduction of this study.

Please contact Barbara Neal of Jellinek, Schwartz & Connolly, Inc.,  
at (202) 789-3309 if you have any technical questions regarding  
this study, or me if other information is required.

Sincerely,

Win C. Cooke  
Business Director

WCC/enh

Enclosure

cc: Deborah Gilmore - JSC, Inc.  
Randy Hinton - Vinings Industries

JELLINEK, SCHWARTZ & CONNOLLY, INC.

August 19, 1992

Ms. Lois Rossi, Chief  
Reregistration Branch (RS-641)  
Office of Pesticide Programs  
c/o Document Processing Desk - 6(a)(2)  
Room 266A, Crystal Mall #2  
1921 Jefferson Davis Highway  
Arlington, VA 22202

**FAXED  
DRAFT**

Re: FIFRA Section 6(a)(2) Submission  
Preliminary Results From the Nabam 21-Day Subchronic Dermal Toxicity Study with  
Aquatreat DN-30 in Rats (Guideline #82-2)

Dear Lois:

On behalf of the Nabam Task Force #56478 (Alco Chemical Division of National Starch and Chemical Company, 909 Mueller Drive, P.O. Box 5401, Chattanooga, Tennessee, 37406, and Vinings Industries, Inc., 3950 Cumberland Parkway, Atlanta, Georgia, 30339), Jellinek, Schwartz & Connolly, Inc., is writing to inform EPA of preliminary findings in the 21-day rat subchronic dermal toxicity study.

Arthur D. Little, Inc. (ADL), has completed a 21-day subchronic dermal toxicity study in rats (ADL Reference: 41178). ADL initiated the study in June 1992, and terminated the in-life portion on June 30, 1992. The rats were administered 0, 46, 457, 1525, or 3050 mg/kg of Aquatreat DN-30 (approximately 30% (w/w) nabam in water), dermally, 5 days per week for 3 consecutive weeks.

There was a possible treatment-related effect on thyroid hormones in this study. Thyroid stimulating hormone (TSH) levels were statistically significantly increased for males at the 46 and 1525 mg/kg dose levels. Triiodothyronine (T<sub>3</sub>) hormone levels were statistically significantly lower for females at the 46, 457, 1525, and 3050 mg/kg dose levels when compared to the controls. Thyroxine (T<sub>4</sub>) hormone levels were statistically significantly lower for females at the 3050 mg/kg dose level. (See attachment.)

**DRAFT**

1015 15th Street, NW, Suite 500, Washington, DC 20005 • Telephone (202) 789-8181 • FAX (202) 789-8243 / 789-8244

P02/04

08-19-92 05:02PM FROM JSCFWASHDC

The attached data are preliminary and have not been subjected to quality assurance review. Please call Barbara Neal at (202) 789-3309 if you have any technical questions on this study or Deborah Gilmore at (202) 789-3276 if you have other questions. M

Sincerely,

**DRAFT**

Diane Allemang  
Jellinek, Schwartz & Connolly, Inc.  
Authorized Representative of the  
Nabam Task Force

**Attachment**

cc: Randy Hinton, Vinings Industries  
Chet Kawa, Alco Chemical  
Terri Stowe, EPA-SRRD

**DRAFT**

JELLINEK, SCHWARTZ & CONNOLLY, INC.

**Clinical Chemistry Thyroid Hormones  
Males**

**DRAFT** J

Dose Level		T <sub>3</sub>	T <sub>4</sub>	TSH
0 mg/kg	Mean SD	90.1 17.63	4.5 2.32	1.48 0.308
46 mg/kg	Mean SD	105.0 21.99	5.7 0.78	3.40* 1.780
457 mg/kg	Mean SD	102.7 15.10	5.1 0.83	2.10 0.276
1525 mg/kg	Mean SD	98.4 9.47	4.4 1.03	3.17* 1.020
3050 mg/kg	Mean SD	104.2 8.32	5.8 0.82	2.80 1.575

\* Statistically significant

**Clinical Chemistry Thyroid Hormones  
Females**

**DRAFT**

Dose Level		T <sub>3</sub>	T <sub>4</sub>	TSH
0 mg/kg	Mean SD	102.3 25.09	4.5 1.29	1.81 0.467
46 mg/kg	Mean SD	76.7* 14.08	3.4 0.52	1.56 0.382
457 mg/kg	Mean SD	75.2* 14.30	4.1 1.11	1.32 0.858
1525 mg/kg	Mean SD	71.8* 5.89	3.6 0.32	1.50 0.735
3050 mg/kg	Mean SD	67.2* 18.03	2.6* 0.72	0.97 0.207

\* Statistically significant

JELLINEK, SCHWARTZ & CONNOLLY, INC.