

US EPA ARCHIVE DOCUMENT

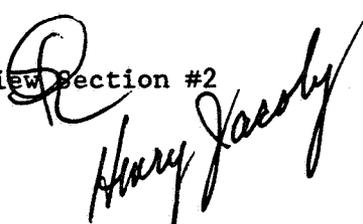
DP Barcode: D166692  
Shaughnessy No.: 111801  
Date Out of EFGWB:

AUG 9 1991

TO: Christine Rice  
Product Manager # 52  
Spec Review & Registration Division (H7508)

FROM: Emil Regelman  
Supervisory Chemist, Review Section #2  
OPP/EFED/EFGWB (H7507C)

THROUGH: Henry Jacoby, Chief  
OPP/EFED/EFGWB (H7507C)



Attached, please find the EFGWB review of:

Reg./File #(s) : 111801-010182  
Common Name : POLY(HEXAMETHYLENEBIGUANIDE)  
Chemical Name : Poly(iminoimidocarbonyliminoimidocarbonyliminohexa-  
methylene)hydrochloride  
Product Type : FUNGICIDE, MICROBICIDE, BACTERIOCIDE/GERMICIDE &  
ALGAECIDE  
Product Name : BAQUACIL  
Company Name : ICI AMERICAS INC.  
Purpose : List C DCI

Date Received: 8/01/91

EFGWB #(s): 91-<sup>0821</sup>~~0745~~

Date Completed: 8/08/91

Action Code: 600 PHASE 2 RESPONSE SUBMISSION

Deferrals to:

Ecological Effects Branch/EFED  
 Science Integration & Policy Staff/EFED  
 Occupational and Residential Exposure Branch/HED  
 Dietary Exposure Branch/HED  
 Toxicology Branch I, II/HED

MEMORANDUM

SUBJECT: List C Chemical Data Call-In  
Poly(hexamethylenebiguanide) (Chemical #111801)

FROM: Mah T. Shamim, Ph.D., Chemist  
Review Section #2  
Environmental Fate and Groundwater Branch  
Environmental Fate and Effects Division (H7507C)

TO: Christine Rice, Product Manager  
Review Section #2  
Accelerated Reregistration Branch  
Spec Review & Reregistration Division (H7508)

THRU: Emil Regelman, Supervisory Chemist  
Review Section #2  
Environmental Fate and Groundwater Branch  
Environmental Fate and Effects Division (H7507C)

AUG 9 1991

Henry M. Jacoby, Chief  
Environmental Fate and Groundwater Branch  
Environmental Fate and Effects Division (H7507C)

Attached is a summary of the data requirements and their status for Poly(hexamethylenebiguanide). Major use sites which trigger these data requirements are secondary/enhanced oil recovery, an aquatic non-food industrial use and swimming pool water systems, an aquatic non-food residential use. Based on a further clarification of use patterns by the Registrant, the only data requirements imposed by EFGWB for the reregistration of this chemical are:

1. Chemical Identity
2. Hydrolysis
3. Photodegradation in Water

In the Reregistration Phase 3 Response, the registrant submitted Phase 3 Summaries of the following studies:

- 161-1 Hydrolysis
- 161-2 Photodegradation in Water
- 162-1 Aerobic Soil Metabolism
- 162-2 Anaerobic Soil Metabolism
- 163-1 Leaching/Adsorption/Desorption

The studies on Hydrolysis (161-1) and Photodegradation in Water (161-2) are being reviewed. The studies on Aerobic Soil Metabolism (162-1), Anaerobic Soil Metabolism (162-2) and Leaching/Adsorption/Desorption (163-1) could not be reviewed because they are not legible. These studies are not needed to fulfill the data requirements.

Data Requirements for Poly(hexamethylenebiguanide)

Data Requirement	Use Pattern	Does EPA have data to satisfy this requirement?	Bibliographic citation	Additional data required by EPA
<u>158.290 Environmental Fate</u>				
160-5	Chemical Identity	A, B	No	Yes <sup>2</sup>
<u>DEGRADATION STUDIES-LAB:</u>				
161-1	Hydrolysis	A, B	No	Yes <sup>3</sup>
<u>Photodegradation</u>				
161-2	In Water	A, B	No	Yes <sup>3</sup>
<u>METABOLISM STUDIES-LAB:</u>				
162-1	Aerobic Soil		No	No <sup>4</sup>
162-2	Anaerobic Soil		No	No <sup>4</sup>
<u>MOBILITY STUDIES:</u>				
163-1	Leaching and Adsorption/Desorption		No	No <sup>4</sup>

**FOOTNOTES:**

- 1** The use patterns are coded as follows: A = Aquatic Non-Food Industrial; B = Aquatic Non-Food Residential
- 2** Data needs validation by DEB.
- 3** Study is being reviewed by EFGWB.
- 4** This study is not needed to support the data requirements; this is based on additional information provided by the registrant on the use pattern of Poly(hexamethylenebigaunide). The study could not be reviewed because it is not legible.