

US EPA ARCHIVE DOCUMENT

8/1/69

PP# 8E0630 citrus
9F0783

BORAX

8/1/69

LO 3
003527

CASWELL/FILE

- Acute Rat Oral (Boric Acid 100%) : LD₅₀ = 3.16 gm/KG
- Acute Rat Oral (Borax 10 Mol) : LD₅₀ = 5.56 gm/KG
- Acute Rat Oral (Borax) : Only summaries available
Male rat LD₅₀ = 6.08 gm/KG
Male rat LD₅₀ = 4.55 gm/KG
Female rat LD₅₀ = 4.98 gm/KG
- Acute Dog Oral (Borax) : LD₅₀ = 6.15 gm/KG only summary available.
- Acute Cavy Oral (Borax) : LD₅₀ = 5.33 gm/KG only summary available.
- Acute Rat Oral (Boric Acid) : LD₅₀ = 3.45 gm/KG only summary available.
- Acute Rat Oral (Boric Acid) : LD₅₀ = 4.08 for female rats. Only summary available.
- Acute Dog Oral (Boric Acid) : LD₅₀ = 3.9 gm/KG only summaries presented.
- Acute Mouse Oral (Boric Acid) : LD₅₀ = 4.1 gm/KG only summary presented.

SUMMARY

The toxicity of this formulation should not create an undue human hazard when usage as per the usage pattern.

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BORAX

Acute Rat Oral (100%)

Groups of 5 male animals were tested per dosage level of 1.0, 2.15, 4.64, 6.81, and 10 gm/KG. The test material was given a 50% weight/volume suspension in distilled water. The animals were fasted 3 to 4 hours prior to dosing.

Results:

The LD₅₀ equals 3.16 gm/KG. The animals at the dosage levels of 1.0 and 2.15 showed no effects of the treatment. The animals at each of the higher dosage levels exhibited depression and shallow, rapid respiration. Each of the animals at the 4.64 and the surviving animals at the 6.81 gm/KG level showed at the 24 hour observation period depression, diarrhea, and pilo erection. The symptoms persisted until time of death.

Gross autopsies performed upon the animals that died showed markedly erythemic lungs and slightly congested adrenals. The stomachs were distended and contained approximately 2.5 ml of a clear liquid. The livers showed pale areas. Autopsies performed upon the surviving animals at termination of the study revealed no gross pathology.

Acute Rat Oral (Borax 10 Mol)

10 male animals were tested per dosage level and a dosage range of from 4.0 to 7.0 gm/KG. LD₅₀ equals 5.56 gm/KG. At 24 hours the majority of the animals at the 4.5, 5.0 and 5.5 gm/KG exhibited depression, diarrhea, ataxia, lacrimation, ptosis, and deep yellow urine stains. The animals at the higher dosage levels (6.0 to 7.0 gm/KG) exhibited ataxia, diarrhea,

deep yellow urine stains, and ptosis.

Gross autopsies performed on the animals that died revealed congested lungs, congested adrenals, and distension of the stomachs and small intestines. Gross autopsies performed on the surviving animals revealed pale mottled kidneys, pale livers, and slightly congested adrenals.

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CASWELL/FILE

July 23, 1969

Henry Shaw Bussey, Entomologist
Pesticides Regulation Division
Agricultural Research Service
U. S. Department of Agriculture
Washington, D. C. 20250

Reg. No. 1624-OA, 1624-OL
Referral Date - 7/25/69

Dear Mr. Bussey:

The toxicological data received in connection with the Boric Acid formulations in the aforementioned Reg. Nos. has been reviewed.

We do not object to the registration of the products for the proposed usage patterns.

Sincerely,

Robert D. Coberly
Biologist
Division of Pesticide Registration
Office of Product Safety
Bureau of Medicine

cc:
OPS/ID-501
MED/NO-14
DPR/NO-530
DPR/NO-530/TMHarris
TOX File
DPR/RDCoberly/cor
7/23/69

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U. S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
PESTICIDES REGULATION DIVISION
WASHINGTON, D. C. 20250

INTERDEPARTMENTAL COORDINATION
OF
ACTIVITIES RELATING TO PESTICIDES

*Referral of Application for Registration under the
Federal Insecticide, Fungicide, and Rodenticide Act*

1. DATE OF REFERRAL

7/9/69 *25-11.9*
No. of 7/28/69

2. FILE SYMBOL/REGISTRATION No.

1624-0A

3. DATE OF APPLICATION

6/23/69

4. NAME & ADDRESS OF APPLICANT OR REGISTRANT

United States Borax & Chemical Corporation
3075 Wilshire Boulevard
Los Angeles, California 90005

5. PRODUCT NAME

20 MULE TEAM (R) BORIC ACID

6. COMMENTS BY COORDINATING AGENCY

B-97
Boron Compounds

For toxicology data referred to PHS, see 1624-OL.

Please state "Keep out of reach of
children" in prominent place on the front

BY (NAME)

8. DATE

9. NAME OF AGENCY

PR USE ONLY	<input type="checkbox"/> SAFETY - FISH AND WILDLIFE	<input type="checkbox"/> SAFETY - HUMAN	<input type="checkbox"/> OTHER:	
	INITIALS	DATE	INITIALS	DATE
	COMMENTS	COMMENTS	COMMENTS	DATE

RIN 5117-93

BORAX REVIEW

TOX # 003527

Page ___ is not included in this copy.

Pages 7 through 8 are not included.

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.
-

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.

U. S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
PESTICIDES REGULATION DIVISION
WASHINGTON, D. C. 20250

INTERDEPARTMENTAL COORDINATION
OF
ACTIVITIES RELATING TO PESTICIDES

Referral of Application for Registration under the
Federal Insecticide, Fungicide, and Rodenticide Act

1. DATE OF REFERRAL

11/9/69 25 17
Ex. of 7/18/69

2. FILE SYMBOL/REGISTRATION No.

1624-0A

3. DATE OF APPLICATION

6/23/69

4. NAME & ADDRESS OF APPLICANT OR REGISTRANT

United States Borax & Chemical Corporation
3075 Wilshire Boulevard
Los Angeles, California 90005

5. PRODUCT NAME

20 MILE TEAM BORAX For Control of Blue
and Green Mold Decay on Citrus

6. COMMENTS BY COORDINATING AGENCY

B-97

Boron Compounds

The following toxicology data on 100% Sodium Tetraborate Decahydrate ($\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O}$) is transmitted with label and formula for review and retention. See also referral on 1624-0A:

1. U.S. Borax Research Corporation, Date: August 2, 1961, 10-Mol Borax, Project: #20-0138-32 Acute Oral Administration, 7 pages.
2. U. S. Borax Research Corporation, Date: January 25, 1961, Boric Acid, Acute Oral Administration, 6 pages.

Place the statement "Keep out of reach of children" in prominent place on the front panel

BY (NAME)

8. DATE

9. NAME OF AGENCY

PR USE ONLY	<input type="checkbox"/> SAFETY - FISH AND WILDLIFE		<input type="checkbox"/> SAFETY - HUMAN		<input type="checkbox"/> OTHER:	
	INITIALS	DATE	INITIALS	DATE	INITIALS	DATE
	COMMENTS		COMMENTS		COMMENTS	

RIN 5117-93

BORAX

TOX REVIEW 003527

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Pages 10 through 11 are not included.

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