

US EPA ARCHIVE DOCUMENT

D166054
DPBARCODE (RECORD)
073301
SHAUGHNESSY NO

REVIEW NO.

EEB REVIEW

DATE IN: 7/18/91 OUT: 11/25/91

CASE # : 812606 REREG CASE #: 4049
SUBMISSION # : S398395 LIST A, B, C, (D)
ID # : 073301-002342

DATE OF SUBMISSION 04/21/91

DATE RECEIVED BY EFED 07/10/91

SRRD/RD REQUESTED COMPLETION DATE 11/05/91

EEB ESTIMATED COMPLETION DATE 11/01/91

SRRD/RD ACTION CODE/TYPE OF REVIEW 627 Generic Data Submiss.

MRID #(S) 41819907,41819908,41887202,41887203,41887204,
41887205,41887206,41887207,41887201

DP TYPE 102 Phase V Review

PRODUCT MANAGER, NO. Barbara Briscoe, 51

PRODUCT NAME(S) Sodium Chlorate

TYPE PRODUCT F R I N H D Herbicide

COMPANY NAME Kerr-McGee Chemical Corporation

SUBMISSION PURPOSE _____

INCLUDE USE(S) _____

COMMON CHEMICAL NAME Sodium chlorate

DP BARCODE: D166054

REREG CASE # 4049

CASE: 812606
SUBMISSION: S398395

DATA PACKAGE RECORD
BEAN SHEET

DATE: 07/08/91
Page 1 of 1

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: REREGISTRATION ACTION: 627 GENERIC DATA SUBMISSION
CHEMICALS: 073301 Sodium chlorate

ID#: 073301-002342

COMPANY: 002342 KERR-MCGEE CHEMICAL CORP

PRODUCT MANAGER: 51 BARBARA BRISCOE

703-308-8065 ROOM: CS1 3H3

PM TEAM REVIEWER: FRANKLIN RUBIS

703-308-8184 ROOM: CS1 4J6

RECEIVED DATE: 04/21/91

DUE OUT DATE: 08/19/91

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 166054

EXPEDITE: N

DATE SENT: 07/08/91

DATE RET.: / /

CHEMICAL: 073301 Sodium chlorate

DP TYPE: 102 Phase V Review

ADMIN DUE DATE: 11/05/91

CSF: N

LABEL: N

ASSIGNED TO

DATE IN

DATE OUT

DIV : EFED

07/10/91

/ /

BRAN: EEB

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SECT:

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REVR :

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CONTR:

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* * * DATA REVIEW INSTRUCTIONS * * *

This is to replace the original Bean Sheet (DP Barcode D165780) which was destroyed in PRATS.

MRID	GUIDELINE
41819907	71-2a
41819908	71-2b
41887202	72-1a
41887203	72-1b
41887204	72-2a
41887205	72-3b
41887206	72-3c
41887207	72-3a
41887201	122-2

* * * ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION * * *

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
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New DP Barcode 166054
DP BARCODE: ~~D165780~~

REREG CASE # 4049

CASE: 812606
SUBMISSION: S398395

DATA PACKAGE RECORD
BEAN SHEET

DATE: 06/27/91
Page 1 of 1

*** CASE/SUBMISSION INFORMATION ***

CASE TYPE: REREGISTRATION ACTION: 627 GENERIC DATA SUBMISSION
CHEMICALS: 073301 Sodium chlorate

ID#: 073301-002342
COMPANY: 002342 KERR-MCGEE CHEMICAL CORP
PRODUCT MANAGER: 51 BARBARA BRISCOE 703-308-8065 ROOM: CS1 3H3
PM TEAM REVIEWER: FRANKLIN RUBIS 703-308-8184 ROOM: CS1 4J6
RECEIVED DATE: 04/21/91 DUE OUT DATE: 08/19/91

*** DATA PACKAGE INFORMATION ***

DP BARCODE: 165780 EXPEDITE: N DATE SENT: 06/27/91 DATE RET.: / /
CHEMICAL: 073301 Sodium chlorate
DP TYPE: 102 Phase V Review
ADMIN DUE DATE: 10/25/91 CSF: N LABEL: N
ASSIGNED TO DATE IN DATE OUT
DIV : EFED / / / /
BRAN: EEB / / / /
SECT: / / / /
REVR : / / / /
CONTR: / / / /

*** DATA REVIEW INSTRUCTIONS ***

Reregistration data for review.

MRID	GUIDELINE
41819907	71-2a
41819908	71-2b
41887202	72-1a
41887203	72-1b
41887204	72-2a
41887205	72-3b
41887206	72-3c
41887207	72-3a
41887201	122-2

*** ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION ***

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

NOV 25 1991

OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

MEMORANDUM

SUBJECT: Review of studies for the List D Chemical, Sodium Chlorate.

FROM: Douglas Urban, Acting Branch Chief
Ecological Effects Branch
Environmental Fate and Effects Division
(H7507C)

TO: Amy Rispin, Chief
Science Analysis and Coordination Staff
Environmental Fate and Effects Division

Douglas Urban
11/22/91

As part of the reregistration process for the List D chemical, Sodium Chlorate, the Sodium Chlorate Reregistration Task Force has submitted the following studies:

Long, R.D., J.B. Beavers, and G.J. Smith. 1991. Sodium Chlorate: A Dietary LC₅₀ Study with the Northern Bobwhite. Performed by Wildlife International Ltd., Easton, Maryland. MRID No. 418199-07.

Long, R.D., J.B. Beavers, and G.J. Smith. 1991. Sodium Chlorate: A Dietary LC₅₀ Study with the Mallard. Performed by Wildlife International Ltd., Easton, Maryland. MRID No. 418199-08.

Ward, T.J. and R.L. Boeri. 1991. Acute Flow-Through Toxicity of Sodium Chlorate to the Bluegill Sunfish, Lepomis macrochirus. Performed by EnviroSystems Division, Resource Analysts, Inc., Hampton, New Hampshire. MRID No. 418872-02.

Ward, T.J. and R.L. Boeri. 1991. Acute Flow-Through Toxicity of Sodium Chlorate to the Mysid (Mysidopsis bahia). Performed by EnviroSystems Division, Resource Analysts, Inc., Hampton, New Hampshire. MRID No. 418872-06.

Ward, T.J. and R.L. Boeri. 1991. Acute Flow-Through Toxicity of Sodium Chlorate to the Daphnid, Daphnia magna. Performed by EnviroSystems Division, Resource Analysts, Inc., Hampton, New Hampshire. MRID No. 418872-04.

Ward, T.J. and R.L. Boeri. 1991. Acute Flow-Through Mollusc Shell Deposition Test with Sodium Chlorate. Performed by EnviroSystems Division, Resource Analysts, Inc., Hampton, New Hampshire. MRID No. 418872-05.

Ward, T.J. and R.L. Boeri. 1991. Acute Flow-Through Toxicity of Sodium Chlorate to the Sheepshead Minnow, Cyprinodon variegatus. Performed by EnviroSystems Division, Resource Analysts, Inc., Hampton, New Hampshire. MRID No. 418872-07.

Ward, T.J. and R.L. Boeri. 1991. Acute Flow-Through Toxicity of Sodium Chlorate to the Rainbow Trout, Oncorhynchus mykiss. Performed by EnviroSystems Division, Resource Analysts, Inc., Hampton, New Hampshire. MRID No. 418872-03.

Ward, T.J. and R.L. Boeri. 1991. Static Acute Toxicity of Sodium Chlorate to the Freshwater Alga, Selenastrum capricornutum. Performed by EnviroSystems Division, Resource Analysts, Inc., Hampton, New Hampshire. MRID No. 418872-01.

These studies were reviewed and categorized by EEB as follows:

<u>Guide. Ref. #</u>	<u>Test Species</u>	<u>% a.i.</u>	<u>Test Type</u>	<u>Test Results</u>	<u>Study Status</u>
71-2 A	Bobwhite Quail	99	Avian Dietary	> 5620 ppm	core 418199-07
71-2 B	Mallard	99	Avian Dietary	> 5620 ppm	core " - 08
72-1 A	Bluegill	>99	Acute Toxicity	> 1000 ppm	invalid 418872-07
72-1 C	Rainbow Trout	>99	Acute Toxicity	> 1000 ppm	invalid " - 03
72-2 A	<u>Daphnia magna</u>	>99	Acute Toxicity	> 1000 ppm	invalid " - 04
72-3 A	Sheepshead Minnow	>99	Acute Toxicity	> 1000 ppm	invalid " - 07
72-3 B	Eastern Oyster	>99	Shell Deposition	> 1000 ppm	invalid " - 05
72-3 C	Mysid Shrimp	>99	Acute Toxicity	> 1000 ppm	invalid " - 06
122-2	Alga	>99	Tier I	EC ₅₀ = 133 ppm	core " - 01

H₂O Quality
Q_{0.5} in mobile

The studies which were classified as invalid may be upgraded to supplemental upon receipt of the following information: 1) an explanation as to the variation in dilution water quality (both fresh and sea water); and, 2) verification that the diluter was functioning properly during the tests, as the toxicant concentration could not be measured. It was confirmed by the Health Effects Division (Josi Morales, Chemist) that the concentration of sodium chlorate could not be measured in the test media due to naturally occurring interference in the dilution water.

The quality of the water used in the freshwater acute toxicity tests (MRID Nos. 418872-02, 418872-03, 418872-04) is questionable as there is a wide range in the parameters measured (i.e. pH, hardness, conductivity). As the dilution water was derived from the same source for all three of these tests, one would expect little variability. The same situation exists with the estuarine studies (MRID Nos. 418872-05, 418872-06, 418872-07) as there is a wide range in salinity between the tests involving water from the same source.

If these studies are upgraded to supplemental, they may be used to satisfy data requirements for this chemical due to its apparent low toxicity and the nature of the compound. If you have any questions, please contact Tracy Perry at 703-557-1451 or Henry Craven at 703-557-0320.

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