8EHQ-0799-14321

24068

RECEIVED
OPPT CBIC

1999 JUL -6 AM 11:38

High Point Chemical
A Kao Group Company
255 Beddington St.
High Point, N.C. 27260
Telephone: (336) 878-4210
FAX: (336) 884-5328

July 2, 1999

Document Control Office (7407)
Room G99 East Tower ATTN: Section 8(e)
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
401 M St., S.W.
Washington, D.C. 20460-0001

8EHQ-98-14321

RE: 8EHQ-1198-14321

Dear Document Control Officer:

The attached report is being provided in response to a request by the High Production Volume Chemicals Branch. We apologize for the delay, which was due to having to request the report from Japan.

Sincerely,

CONTAINS NO CBI

Hester Kobayashi
Manager, Kao Group Product Safety

Attached: Vinycizer 85 (Dioctyl phthalate):Acute toxicity to rainbow trout
(Preliminary toxicity screen)

RECEIVED
OPPT NCIC
99 JUL 27 PM 2:32

89990000259

NOT CBI
HK. 7/2/99

Schedule No : KAS/260
Report No : 96/KAS260/0422

VINYCIZER 85: Acute toxicity to rainbow trout

(Preliminary toxicity screen)

FINAL REPORT

Study Director

C A Jenkins

To:
Kao Corporation
Tochigi Research Laboratories
2606 Akabane Ichikaimachi, Haga
Tochigi 321-34
Japan

From:
Huntingdon Life Sciences Ltd
Eye
Suffolk IP23 7PX
England

Final: 9 July 1996

Huntingdon Life Sciences

VINYCIZER 85: ACUTE TOXICITY TO RAINBOW TROUT

(PRELIMINARY TOXICITY SCREEN)

FINAL REPORT

Schedule No : KAS/260
Report No : 96/KAS260/0422

I declare that the report following constitutes a true and faithful account of the procedures adopted and the results obtained in the performance of this study.

The study was conducted in accordance with the principles of Good Laboratory Practice but no formal quality assurance procedures were undertaken.

C.A. Jenkins, B.Sc, C.Biol, M.I.Biol, M.I.F.M.
(Study Director)

.....C.A. Jenkins.....

Date: .....9 July 1996.....

CONTENTS

		Page
	Title page	1
	Signature page	2
	Contents	3
1.	SUMMARY	4
2.	TEST MATERIAL	5
3.	TEST PROCEDURES	5
4.	RESULTS	6

1. SUMMARY

1.1 The acute lethal toxicity of VINYCIZER 85 to the rainbow trout was assessed under static exposure conditions over a period of 96 hours. Exposure concentrations were not verified by chemical analysis.

1.2 Groups of five fish were exposed to VINYCIZER 85 at nominal concentrations of 0.1, 0.32, 1, 3.2, 10, 32 and 100 mg/l. The test media were individually prepared by dilution of aqueous stock dispersions; to aid dispersion, ultrasound treatment and HCO-40 were employed. Control groups of fish were placed into dilution water alone or dilution water containing HCO-40 at the same level as in the test medium at the highest concentration.

1.3 The test was conducted at 13.4 to 14.9°C in treated tap water of hardness 222 to 236 mg/l as $CaCO_3$ at pH values in the range 7.9 to 8.4. At 0.1 to 3.2 mg/l, the test media were clear and colourless; at 10, 32 and 100 mg/l, they were hazy dispersions.

1.4 Observations of the fish were made at least at 24-hour intervals.

Hyperventilation was noted at 10 mg/l and higher concentrations. All fish were affected within 15 minutes of exposure but this was not sustained and all fish appeared normal from 24 hours onwards.

The no-observed-effect concentration (NOEC) was 3.2 mg/l.

No mortalities were observed during the test.

The 96-hour median lethal concentration (LC50) of VINYCIZER 85 to the rainbow trout was >100 mg/l.

2. TEST MATERIAL

A consignment of VINYCIZER 85 (approximately 300 g), a clear, colourless liquid, was received at Huntingdon Life Sciences Ltd (Eye) 21 November 1995. It was further identified by the batch number 2884 and was stored in the dark under ambient conditions until use.

The identity, strength and purity of the test material received and its stability under the storage conditions were the responsibility of the Sponsor.

3. TEST PROCEDURES

The test was conducted between 8 and 12 May 1996 according to the agreed Study Protocol (PTS12c).

The rainbow trout used in the test were supplied by Fish Network Ltd, Devon and arrived at Huntingdon Life Sciences (Eye) 25 January 1996. At the laboratory, they were held in an aerated supply of dilution water under flow-through conditions until removed for testing.

The fish were maintained and the study conducted in treated tap water (dechlorinated tap water which had been blended with reverse-osmosis, softened tap water).

No mortality occurred during the 14-day period before the test.

The mean wet-weight of the fish used in the test was 1.0 g; their mean fork length was 4.4 cm.

Groups of five fish were exposed to VINYCIZER 85 at nominal concentrations of 0.1, 0.32, 1, 3.2, 10, 32 and 100 mg/l. Control groups of fish were placed into dilution water alone or dilution water containing the dispersant HCO-40 at the same level as in the test medium at the highest concentration.

Two concentrated aqueous dispersions (nominally 10 and 1000 mg/l) were prepared by adding the test material, mixed with an equal amount of HCO-40, to dilution water; these concentrated dispersions were treated by ultrasound for 30 minutes. Aliquots of the appropriate concentrated dispersions were diluted in the test vessels to a final volume of 14 litres; the 10 mg/l stock was used at 0.1 to 1 mg/l and the 1000 mg/l preparation at 3.2 to 100 mg/l. The media were gently aerated during the test.

Chemical analysis of control and test media was not undertaken.

4. RESULTS

No mortalities occurred during the test at any VINYCIZER 85 exposure concentration or in the control group.

The 24- to 96-hour median lethal concentration (LC50) of VINYCIZER 85 to the rainbow trout was >100 mg/l.

At 10, 32 and 100 mg/l, all fish exhibited hyperventilation within 15 minutes of exposure but from 24 hours onwards, all fish appeared normal.

The no-observed-effect concentration (NOEC) was 3.2 mg/l.

At 0.1 to 3.2 mg/l, the test media were clear and colourless; at 10, 32 and 100 mg/l, they were hazy dispersions.

The results of the water quality analysis conducted at the start of the test and at 24-hour intervals thereafter are summarised below.

- temperature, °C	13.4 - 14.9
- pH	7.8 - 8.4
- dissolved oxygen, % ASV*	65 - 102
- total hardness, mg/l $CaCO_3$	222 - 236

* air saturation value

No concentration-related changes in these parameters were observed.