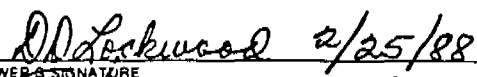


DOW CONFIDENTIAL INFORMATION

R & D REPORT HEALTH & ENVIRONMENTAL SCIENCES THE DOW CHEMICAL COMPANY		FILE NUMBER	
		CMT NUMBER	
		LABORATORY REPORT CODE TXT:DR-0296-5288-001	
		DATE ISSUED March 1, 1988	
DEPARTMENT Health & Environmental Sciences-Texas		LAB. NO. 485	PROBLEM NO. 0000136
TITLE D-245 CONDENSED VENT GASES FROM UNIT I, OYSTER CREEK DIVISION 1/5/88: ACUTE TOXICOLOGICAL PROPERTIES			2 PAGES IN FULL REPORT
AUTHOR(S)/MASTER NUMBER(S) D. D. Lockwood (052620)			
AUTHOR(S) SIGNATURE(S)  2/25/88			
REVIEWER'S SIGNATURE  3-1-88 J. A. Young (077384)		This report is: ☐ INTERIM ☒ FINAL and mainly: ☒ NEW ☐ REVIEW	
DESCRIPTIVE SUMMARY WITH CONCLUSIONS A sample of D-245 condensed vent gases from Unit I, Oyster Creek Division 1/5/88 was submitted to the Acute Toxicology Laboratory of Health & Environmental Sciences-Texas for acute toxicological evaluation. The test material, a gray liquid, was submitted by Vinyl Chloride-Unit I/EDC plant, Freeport, Texas. The DOT (Department of Transportation) test for corrosiveness to skin and the repeated skin irritation test were conducted using New Zealand White rabbits (Ray Nichols Rabbitry, Lumberton, Texas). Acute oral studies were conducted using male Sprague-Dawley rats (Charles River Breeding Laboratories, Inc., - Wilmington, MA). A Department of Transportation (DOT) test for corrosiveness to the skin was conducted. A corrosive material is one that causes irreversible change or destruction to the intact skin of an albino rabbit after an exposure period of 4 hours or less. The test procedure used is described in the <u>Code of Federal Regulations</u>, Title 49, Section 173.240, Appendix A. A 1-hour and 4-hour exposure of the test material to the clipped backs of 6 rabbits resulted in slight erythema, moderate edema, but no necrosis. The test material, therefore, is considered <u>not corrosive</u> by the DOT test after an exposure of either 1 or 4 hours.			
ARE MATERIALS DESCRIBED IN THIS REPORT ON TSCA INVENTORY? IF NO, LIST MATERIALS ON REVERSE SIDE OF THIS PAGE THAT WE WILL USE OR PRODUCE COMMERCIALY THAT WILL REQUIRE A PMN		YES ☒ NO ☐	
DISTRIBUTION: DEPARTMENT FILES R & D ADMINISTRATION CENTRAL REPORT INDEX (566 Bldg. - Midland)		SEE ATTACHED LIST	

Because the test material was not corrosive to the skin by the DOT test, a repeated skin irritation test was conducted. In the skin irritation test, the test material was topically applied to intact and abraded skin of a New Zealand White rabbit at 3 sites. The confined sites on the abdomen, received 3 (abraded skin) or 5 (intact skin) 0.5 ml applications. The unconfined site located on the right ear pinna received five 0.1 ml applications. Prolonged (24 hrs) and repeated exposures resulted in slight to moderate erythema to both the intact and abraded skin. Superficial necrosis was observed on the intact skin. No erythema was observed on the ear after prolonged contact; however, slight erythema was observed after repeated applications.

The acute oral toxicity is low; range-finding tests indicate the oral LD₅₀ for male rats is >1000 mg/kg when fed as a 10% solution in corn oil. Three rats/-dose level were administered 1000, 500, or 250 mg/kg of the test material by single-dose gavage. All rats appeared healthy and gained weight during the 2-week observation period. No lesions were observed upon gross pathological examination of all rats at the 2000 mg/kg level 2 weeks after treatment.

Because superficial necrosis was observed on the intact skin after 24-hours contact, the eye irritation and acute percutaneous absorption tests were not conducted. The test material is presumed to be corrosive to the eye.

DOW CONFIDENTIAL

DO 078472
CONFIDENTIAL