

HCBE IN BLOOD
BY EXPOSURE AND BY YEARS IN PLANT

1. BY EXPOSURE

<u>Group</u>	<u>Air Exposure, ppb</u>	<u>Concentration in Blood, ppb</u>
Engineers	15	30
Hex SOT	10	180
Shift Supervisors	5	395
O.T.'s	0.7-2.5	45

2. BY TIME IN PLANT

<u>Group</u>	<u>Years In Plant</u>	<u>Concentration In Blood, ppb</u>
Shift Supervisors	10-17	395
O.S.'s	8-13	335
S.O.T.'s	3-8	180
O.T.'s	1-3	45
Engineer	0.2-2	30
Control	0	5

HCBE concentration in blood is directly related to time in Plant.

CYB/db/11-13-75

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Table 2

EXPOSURE BY WORK TYPE (ppb)

<u>O.S.</u>	<u>Per/Tet</u>	<u>V₂/TCP</u>	<u>EDO</u>
HCE	16.1	17.2	23.6
HCBd	3.4	5.0	4.0
HCBZ	0.8	1.4	6.2

<u>S.O.T.</u>	<u>Per/Tet</u>	<u>Hex Area</u>	<u>EDO</u>
HCE	23.4	91.0	47.3
HCBd	5.1	16.3	7.0
HCBZ	2.2	9.8	1.2

<u>O.T.</u>	<u>AHCl</u>	<u>Roundman</u>	<u>EDO</u>
HCE	10.0	31.7	20.0
HCBd	0.6	5.8	2.7
HCBZ	1.7	0.7	2.5

<u>Supervisor</u>	<u>S.S.</u>	<u>Engineer</u>	<u>TLV</u>	<u>AVG</u>
HCE	32.7	69.8	1000	40
HCBd	6.2	5.4	100	6.
HCBZ	5.4	14.7	100	6.

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CONCENTRATIONS OF HCBZ IN AIR

AREA SAMPLES

	<u>CONTROL ROOM</u>	<u>HEX AREA</u>
1971	99 ppb (vol)	198
1972	157	74
1975	3.2	43

Absorption of HCBZ by Benzene from air.

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HALF LIFE OF HCBZ IN BLOOD AFTER EXPOSURE TERMINATED

<u>When Leave Plant</u>	<u>HCBZ Concentration, ppb</u>	
	<u>1 Year</u>	<u>2 Years</u>
300-400e	424	
300-400e	231	248
180e		162

There is no immediate drop; decay appears to require at least several years.

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Emie

		YRS IN SOLVENTS				PLANT	
		0-2	2-4	4-6	6-8	8-10	10+
YEARS SINCE LAST IN SOLVENTS PLANT	0-2	RIB SMITH	468 465			424 231, 248	280 RALPH WILLIE
	2-4	BEN BROWN		162			
	4-6	CLYDE BAYNE		JAME CUTLER	* MICKY HUNT		
	6-8			SANFORD LEEJUNE			
	8-10			JAMES CRY			
	10+	LENNIE BERMAN * LILA SPEDER JEAN PACHE	* MIKE CHANNA * JOHN DUNN SAM SAIA JOHN JAMES				

RICHARD DAVID

TABLE X 1
 'RATE OF DECAY' - HCBZ IN BLOOD