PL/I F COMPILER OPTIONS SPECIFIED ARE AS FOLLOWS--

CHAR60,ATR,XREF

THE COMPLETE LIST OF OPTIONS USED DURING THIS COMPILATION IS--

```
  EBCDIC
  CHAR60
NOMACRO
  SOURCE2
NOMACDCK
  COMP
  SOURCE
  ATR
  XREF
NOEXTREF
NOLIST
  LOAD
NODECK
  FLAGW
NOSTMT
  SIZE=0096532
  LINECNT=057
  OPT=01
  SORMGIN=(002,072,001)
NOEXTDIC
NONEST
  OPLIST
  SYNCHKT
```

```
*OPTIONS IN EFFECT*     EBCDIC,CHAR60,NOMACRO,SOURCE2,NOMACDCK,COMP,SOURCE,ATR,XREF,NOEXTREF,NOLIST,LOAD,
*OPTIONS IN EFFECT*     NODECK,FLAGW,NOSTMT,SIZE=0096532,LINECNT=057,OPT=01,SORMGIN=(002,072,001),NOEXTDIC,
*OPTIONS IN EFFECT*     NONEST,OPLIST,SYNCHKT
```

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```
//AROCHO       JOB (5050,R0000000,05,0029,000),'KBOUCH',MSGLEVEL=1        JOB 968
***MAIN         TIME=0
//STEP1 EXEC PROC=PL1LFC,PARM.PL1L='CHAR60,ATR,XREF'
XXPL1L    EXEC PGM=IEMAA,PARM='NA,NX',REGION=100K                        50077000
XXSYSPRINT DD  SYSOUT=A                                                   50077100
XXSYSLIN   DD  DSN=&&LOADSET,DISP=(MOD,PASS),UNIT=SYSDA,                 X50077200
XX             DCB=(RECFM=FB,LRECL=80,BLKSIZE=3200),                     X50077300
XX             SPACE=(CYL,(2,1))                                          50077400
XXSYSUT3   DD  UNIT=SYSDA,SPACE=(CYL,(1,1))                               50077500
XXSYSUT1   DD  UNIT=(SYSDA,SEP=(SYSUT3,SYSLIN)),                         X50077600
XX             SPACE=(CYL,6,,CONTIG)                                      50077700
XXSYSPUNCH DD SYSOUT=B                                                    50077800
//PL1L.SYSIN DD *
//
IEF236I ALLOC. FOR AROCHO   PL1L     STEP1
IEF237I 7A2   ALLOCATED TO SYSPRINT
IEF237I 262   ALLOCATED TO SYSLIN
IEF237I 152   ALLOCATED TO SYSUT3
IEF237I 165   ALLOCATED TO SYSUT1
IEF237I 7F0   ALLOCATED TO SYSPUNCH
IEF237I 700   ALLOCATED TO SYSIN
IEF142I - STEP WAS EXECUTED - COND CODE 0004
IEF285I   SYS73283.T095811.RV000.AROCHO.LOADSET         PASSED
IEF285I   VOL SER NOS= DSK006.
IEF285I   SYS73283.T095811.RV000.AROCHO.R0000002        DELETED
IEF285I   VOL SER NOS= DSK005.
IEF285I   SYS73283.T095811.RV000.AROCHO.R0000003        DELETED
IEF285I   VOL SER NOS= DSK004.
********************MONSANTO COMPANY - MANAGEMENT INFORMATION AND SYSTEMS DEPARTMENT - CREVE COEUR COMPUTER CENTER********************
*     TIME STARTED  9.58.34    REGION SIZE 100K    I/O TIME     .040    MACHINE UNITS      .231    STEP COST              $.55      *
*     TIME ENDED    9.59.08    CORE USED   100K    CPU TIME     .080    I/O UNITS          .030    PGM/SETUP CHARGE       $.00      *
*     STEP ABEND CODE   000    D.S. ALLOCS.  03    RUN TIME     .120    OCCUPANCY          .201    I.D.      7328309583471001       *
****MISD****370/165****MISD****370/165****MISD****370/165****MISD****370/165****MISD****370/165****MISD****370/165****MISD*******12*
IEF285I   SYS73283.T095811.RV000.AROCHO.LOADSET         DELETED
IEF285I   VOL SER NOS= DSK006.
********************MONSANTO COMPANY - MANAGEMENT INFORMATION AND SYSTEMS DEPARTMENT - CREVE COEUR COMPUTER CENTER********************
*     JOB COST          $.55          DATE     WED 10 OCT 73          JOB CLASS A  PRIO 11            TIME STARTED  9.58.34      *
*     MACHINE UNITS     .231          RUN TIME          .120          PSEUDO CODE     5050            TIME ENDED    9.59.11      *
****MISD****370/165****MISD****370/165****MISD****370/165****MISD****370/165****MISD****370/165****MISD****370/165****MISD*******12*
```

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H A S P S Y S T E M L O G

```
$  9.58.03 JOB 968 -- AROCHO    -- BEGINNING EXEC - INIT 4 - CLASS A
 *  9.58.33 JOB 968 IEF403I AROCHO   STARTED
 *  9.59.12 JOB 968 IEF404I AROCHO   ENDED
$  9.59.14 JOB 968 END EXECUTION.
```

HASP-II JOB STATISTICS -- 56 CARDS READ -- 255 LINES PRINTED -- 0 CARDS PUNCHED -- 1.18 MINUTES EXECUTION TIME

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```
HASP-II***HASP-II***HASP-II     START JOB 968     9.59.17 AM     10 OCT 73     BIN 0029     KBOUCH     HASP-II***HASP-II***HASP-II
HASP-II***HASP-II***HASP-II     START JOB 968     9.59.17 AM     10 OCT 73     BIN 0029     KBOUCH     HASP-II***HASP-II***HASP-II
HASP-II***HASP-II***HASP-II     START JOB 968     9.59.17 AM     10 OCT 73     BIN 0029     KBOUCH     HASP-II***HASP-II***HASP-II
HASP-II***HASP-II***HASP-II     START JOB 968     9.59.17 AM     10 OCT 73     BIN 0029     KBOUCH     HASP-II***HASP-II***HASP-II
HASP-II***HASP-II***HASP-II     START JOB 968     9.59.17 AM     10 OCT 73     BIN 0029     KBOUCH     HASP-II***HASP-II***HASP-II
HASP-II***HASP-II***HASP-II     START JOB 968     9.59.17 AM     10 OCT 73     BIN 0029     KBOUCH     HASP-II***HASP-II***HASP-II
```

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```
REX : PROCEDURE OPTIONS(MAIN) ;
  DCL(PIP,PIPI,OMCP,OMCPI,MMCP,MMCPI,PMCP,PMCPI,DCP,DCPI,TCP,TCPI,D,C,
        H,Z,A,K,X,COUNT)FLOAT(16) ;
  DCL ( APIP ,AOMCP, AMMCP , APMCP , ADCP , ATCP ) FLOAT(16) ;
   COUNT = 0. ;
  Z = 0. ; PIPI = 1. ;
  D = 0. ;
                A = 1.610027 ;
     START : OMCPI,MMCPI,PMCPI,DCPI,TCPI = 0. ;
/* THIS PROGRAM CALCULATES COMPOSITION OF OVERFLOW FROM CONTINUOUS AROCLOR CHLO
RINATORS          */
            LOOP :
            PIP = 0.80 - COUNT ; COUNT = COUNT + 0.001 ;
            C = C + 1. ;
            IF PIP < 0.0 THEN GOTO FINISH ;
                K = (PIPI - PIP ) / ( A*PIP ) ;
            PIP = PIPI / (A*K + 1. ) ;
                OMCP = (OMCPI + K * PIP ) / ( 1. + K / 1.9952 ) ;
                MMCP = (MMCPI + K*PIP/11.087) / ( 1. + K/1.9952 ) ;
                PMCP = (PMCPI + K *PIP/1.9237 ) / ( 1.+ K/ 1.9952 );
          DCP=(DCPI+ K*(OMCP+MMCP+PMCP)/1.9952)/(1.+ K/29.831) ;
                TCP  =  TCPI + K*DCP/29.831 ;
                X    = OMCP + PMCP + MMCP + 2.*DCP + 3.* TCP ;
            PUT SKIP LIST (COUNT , K , X , PIP )  ;
            IF X > (0.249+Z)& X< (0.251+Z) THEN GOTO WRITE ;
                  ELSE GOTO LOOP ;
            WRITE :
            APIP = PIP ; AOMCP = OMCP ; AMMCP = MMCP ; APMCP = PMCP ;
            ADCP = DCP ; ATCP = TCP ;
            B = PIP*154.2 + (OMCP+MMCP+PMCP)*188.65 + DCP*223.1
            + TCP*258. ;
            PIP = PIP*154.2/B ; OMCP = OMCP*188.65/B ;
            PMCP = PMCP*188.65/B ; MMCP = MMCP*188.65/B ;
            DCP = DCP*223.1/B ;  TCP = TCP*258./B ;
            PUT PAGE EDIT ('PIP  = ',PIP)(COLUMN(30),A,F(8,6)) ;
            PUT SKIP EDIT ('OMCP = ',OMCP)(COLUMN(30),A,F(8,6)) ;
            PUT SKIP EDIT('MMCP = ',MMCP)(COLUMN(30),A,F(8,6)) ;
            PUT SKIP EDIT('PMCP = ',PMCP)(COLUMN(30),A,F(8,6)) ;
            PUT SKIP EDIT('DCP  = ',DCP)(COLUMN(30),A,F(8,6)) ;
            PUT SKIP EDIT('TCP  = ',TCP)(COLUMN(30),A,F(8,6)) ;
                PUT SKIP EDIT(' MOLES CHLORINE/MOLE BIPHENYL   ', X)
                                (COLUMN(20),A(32),F(8,6)) ;
            PUT PAGE ;
            COUNT = C*COUNT ;
            D = D + 1. ;
            GET LIST (Z) ;
            PIPI = APIP ; OMCPI = AOMCP ; MMCPI = AMMCP ;
            PMCPI = APMCP ; DCPI = ADCP ; TCPI = ATCP ;
            IF D = 4. THEN GOTO FINISH ;
                ELSE GOTO LOOP ;
     FINISH : END REX ;
```

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ATTRIBUTE AND CROSS-REFERENCE TABLE

DCL NO.	IDENTIFIER	ATTRIBUTES AND REFERENCES
2	A	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 8,15,16
3	ADCP	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 31,55
3	AMMCP	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 29,53
3	AOMCP	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 28,52
3	APIP	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 27,51
3	APMCP	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 30,54
3	ATCP	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 32,56
2	B	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 33,34,35,36,37,38,39
2	C	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 12,12,48
2	COUNT	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 4,10,11,11,23,48,48
2	D	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 7,49,49,57
2	DCP	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 20,21,22,31,33,38,38,44
2	DCPI	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 9,20,55
60	FINISH	STATEMENT LABEL CONSTANT 14,58
2	K	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 15,16,17,17,18,18,19,19,20,20,21,23
10	LOOP	STATEMENT LABEL CONSTANT 26,59

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DCL NO.	IDENTIFIER	ATTRIBUTES AND REFERENCES
2	MMCP	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 18,20,22,29,33,37,37,42
2	MMCPI	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 9,18,53
2	OMCP	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 17,20,22,28,33,35,35,41
2	OMCPI	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 9,17,52
2	PIP	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 10,13,15,15,16,17,18,19,23,27,33,34,34,40
2	PIPI	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 6,15,16,51
2	PMCP	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 19,20,22,30,33,36,36,43
2	PMCPI	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 9,19,54
1	REX	ENTRY,DECIMAL,FLOAT(SINGLE)
9	START	STATEMENT LABEL CONSTANT
	SYSIN	FILE,EXTERNAL 50
	SYSPRINT	FILE,EXTERNAL 23,40,41,42,43,44,45,46,47
2	TCP	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 21,22,32,33,39,39,45
2	TCPI	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 9,21,56
27	WRITE	STATEMENT LABEL CONSTANT 25
2	X	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 22,23,24,24,46
2	Z	AUTOMATIC,ALIGNED,DECIMAL,FLOAT(DOUBLE) 5,24,24,50

STLCOPCB4067362

STORAGE REQUIREMENTS.

THE STORAGE AREA FOR THE PROCEDURE LABELLED REX IS 404 BYTES LONG.

THE PROGRAM CSECT IS NAMED REX AND IS 1460 BYTES LONG.

THE STATIC CSECT IS NAMED ****REXA AND IS 547 BYTES LONG.

STATISTICS SOURCE RECORDS = 51,PROG TEXT STMNTS = 60,OBJECT BYTES = 1460

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TABLE OF OFFSETS AND STATEMENT NUMBERS WITHIN PROCEDURE REX

OFFSET (HEX)	0000	0034	003A	0040	0046	004C	0052	0070	007C	0088	0094	009C	00A0	00B6	00CC	00EA	010C	012E	0158	016C	0190
STATEMENT NO	1	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
OFFSET (HEX)	0108	0218	021C	0220	0226	022C	0232	0238	023E	0244	0276	0286	0296	02A6	02B6	02C6	02D6	032C	0382	03D8	042E
STATEMENT NO	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
OFFSET (HEX)	0484	04DA	0534	0544	0550	055C	057A	0580	0586	058C	0592	0598	059E	05A6	05AA	05AE					
STATEMENT NO	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60					

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COMPILER DIAGNOSTICS.

WARNINGS.

IEM0227I NO FILE/STRING OPTION SPECIFIED IN ONE OR MORE GET/PUT STATEMENTS. SYSIN/SYSPRINT HAS BEEN ASSUMED IN EACH CASE.

END OF DIAGNOSTICS.

AUXILIARY STORAGE WILL NOT BE USED FOR DICTIONARY WHEN SIZE = 69K

COMPILE TIME .02 MINS

ELAPSED TIME .21 MINS

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HASP-II***HASP-II***HASP-II END JOB 968 10.00.21 AM 10 OCT 73 BIN 0029 KBOUCH HASP-II***HASP-II***HASP-II
HASP-II***HASP-II***HASP-II END JOB 968 10.00.21 AM 10 OCT 73 BIN 0029 KBOUCH HASP-II***HASP-II***HASP-II
HASP-II***HASP-II***HASP-II END JOB 968 10.00.21 AM 10 OCT 73 BIN 0029 KBOUCH HASP-II***HASP-II***HASP-II
HASP-II***HASP-II***HASP-II END JOB 968 10.00.21 AM 10 OCT 73 BIN 0029 KBOUCH HASP-II***HASP-II***HASP-II
HASP-II***HASP-II***HASP-II END JOB 968 10.00.21 AM 10 OCT 73 BIN 0029 KBOUCH HASP-II***HASP-II***HASP-II
HASP-II***HASP-II***HASP-II END JOB 968 10.00.21 AM 10 OCT 73 BIN 0029 KBOUCH HASP-II***HASP-II***HASP-II

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