REPORT SHEET

GC/MS ANALYSIS 1055459-RM

PEAK # (SEE ATTACHED CHROMATOGRAM

1, 2 MOL WT 210 = EXPECTED PRODUCT (2 ISOMERS); SUPPORTED BY FRAGMENTATION PATTERN

3 MOL WT 208 = STYRENE DIMER

4, 5 MOL WT 314 = PRODUCT + STYRENE; MASS SPECTRA ESSENTIALLY THE SAME, IMPLYING ISOMERS

6, 7 MOL. WT 314 = PRODUCT + STYRENE; MASS SPECTRA SAME, BUT DIFFERENT THAN THOSE OF 4 & 5

DSW 298008

GC/MS FILE X-1

SIGNATURE	DATE	NOTE BOOK
Brent D. Kelly II	6/11/96	

WORK REQUEST

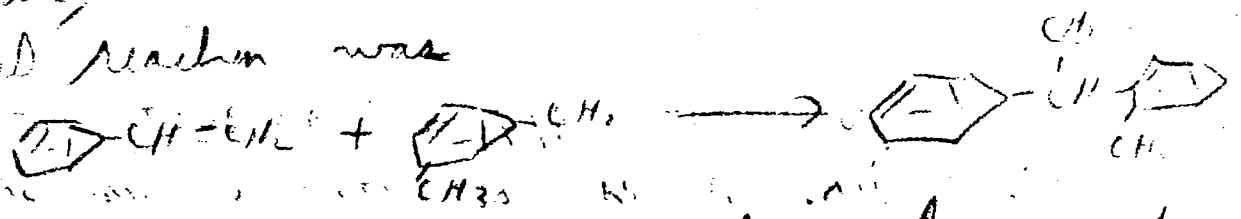
TO

APPLIED SCIENCES
RESEARCH CENTER LABORATORIES
MONSANTO INDUSTRIAL CHEMICALS CO.

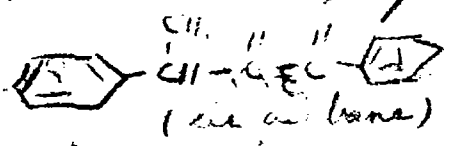
WORK REQUESTED Identification

REASON/COMMENTS The sample is the reaction mixture obtained by reaction of styrene with excess m-xylene over $AlCl_3$, CH_3NO_2.

Desired reaction was

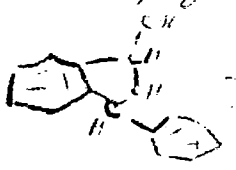


Possible side products are styrene dimers, of possible structure



(cis and trans)

and/or



(2 pamers)

My GLC attached.

SAMPLE IDENTIFICATION 1052459-2 RM

(See attached earlier work on styrene dimers)

J. C. Wiggans
REQUESTER

BLDG. T LAB./OFFICE 210

MAIL ZONE T2E

PHONE NUMBER 4620

PRODUCT Encapsulant

BUSINESS GROUP Fine, Prod

DATE SUBMITTED 5-27-76

DATE NEEDED BY 6-10-76

JOB NUMBER 45-000-760.42-1017.1

SAMPLE DISPOSAL ☐ RETURN ☐ DISCARD

R-108 REV. 7-72

(SUBMIT WHITE, YELLOW AND GREEN COPIES)

DSW 298009

STLCOPCB4067920

REPORT SHEET

A MOLECULAR WEIGHT OF 676 WAS DETERMINED BY SOLIDS PROBE MASS SPECTROMETRY, CONFIRMING THE EXPECTED PRODUCT. THE FRAGMENTATION PATTERN IS ALSO CONSISTENT WITH THE PREDICTED STRUCTURE. NO 688 (M+16) ION WAS DETECTED, INDICATING COMPLETE REDUCTION OF THE $-N=O$.

DSW 298010

FILE # 76-122

SIGNATURE Brent A. Kelley, II

DATE 6/11/96

NOTE BOOK

STLCOPCB4067921

WORK REQUEST

TO

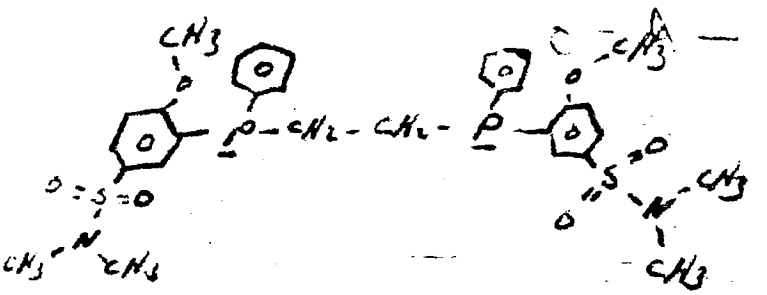
APPLIED SCIENCES
RESEARCH CENTER LABORATORIES
MONSANTO INDUSTRIAL CHEMICALS CO.

WORK REQUESTED Please Run Mass Spectrum of Sample 1047682

REASON/COMMENTS Structure Confirmation (i.e. MW + frag pattern)

- Soluble in $CHCl_3$, CH_2Cl_2

- Structure thought to be:



SAMPLE IDENTIFICATION 1047682

DSW 298011

W. C. Chestnutt
REQUESTER

BLDG. 7 LAB./OFFICE 203

MAIL ZONE 72E

PHONE NUMBER 4-4563

PRODUCT Lee Lee

BUSINESS GROUP F+F

DATE SUBMITTED 10 June 76

DATE NEEDED BY ~~6/17/76~~ 6/17/76

JOB NUMBER 45-000-960.12-0115121

SAMPLE DISPOSAL ☑ RETURN ☐ DISCARD

R-108 REV. 7-72

(SUBMIT WHITE, YELLOW AND GREEN COPIES)

STLCOPCB4067922