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**Committee D16 on Aromatic Hydrocarbons and Related Chemicals
Subcommittee D16.04 on Instrumental Analysis**

Research Report RR #D16-1026

**Inter-Laboratory Study to Establish Precision Statements for ASTM
D5776, Standard Test Method for Bromine Index of Aromatic
Hydrocarbons by Electrometric Titration**

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COMMITTEE D-16 ON AROMATIC HYDROCARBONS AND RELATED MATERIALS

RR: D-16:

INTERLABORATORY TEST STUDY FOR THE DETERMINATION OF BROMINE INDEX OF AROMATIC HYDROCARBONS BY ELECTROMETRIC TITRATION METHOD D-5776

2.0 INTRODUCTION

The purpose of this study was to determine the repeatability and reproducibility for bromine index of aromatic hydrocarbons utilizing method D5776-95. The current version of the method only contains a single laboratory repeatability statement in Section 13: Precision and Bias.

3.0 TEST METHOD

A copy of D5776- 95 is attached as Appendix I.

4.0 PARTICIPATING LABORATORIES

The following laboratories participated in this study:

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5.0 INTERLABORATORY TEST PROGRAM INSTRUCTIONS

D-16 OE.08 BROMINE INDEX INTERLABORATORY STUDY (D5776)

Enclosed in this package are the following items:

- A. Interlaboratory Study Protocol
- B. A copy of the method.
- C. Report form and data sheet.
- D. MSDS sheets for all chemicals provided will accompany the samples.

Four Samples will be provided:

Standard Cyclohexene in Heptane standard.

Sample #1 Benzene sample with a higher Br Index.

Sample #2. Cumene sample with a typical Br Index.

Sample #3. Benzene sample with a low level Br Index.

A specific instrument is not specified in the method but should meet the requirements specified in Section 6 of the method. A known sample has been included, optimise your instrument to read the standard value prior to running the unknown samples.

Have 1 (one) operator analyse each of the samples on the same day as close in time as practical.

Using the provided form, list your name, company, electrode(s) used, type of instrument and results. A section is provided for comments.

If more than one instrument is available at your location please make copies of the data sheet and include data from as many instruments as samples allow.

Mail the report form and any comments back by **01 September, 1997.**