1 January 2022

Committee D04 on Road and Paving Materials
Subcommittee D04.47 on Miscellaneous Asphalt Tests

Research Report: D04-2000

Interlaboratory Study to Establish Precision Statements for ASTM D2042-22, Test Method for Solubility of Asphalt Materials in Trichloroethylene

Technical contact:
Zineb Hafassa,
Martin Asphalt Company
300 Christi Pl
South Houston, TX 77587-5165
USA
zineb.hafassa@martinmlp.com

ASTM International
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959

Table of Contents

1. Introduction/ Background: 3
2. Test Method:....3
3. Participating Laboratories: 3
4. Description of Samples: 3
5. Interlaboratory Study Instructions....3
6. Description of Equipment/Apparatus:....4
7. Data Report Forms: 4
8. Statistical Data Summary:....4
9. Precision and Bias Statement:....4
Annex A: Interlaboratory Study Instructions 7
Annex B: Description of Equipment/Apparatus....9
Annex C: Raw Data....11
Annex D: Statistical Data Summary....13

1. Introduction/ Background:

Interlaboratory Study 1494 was conducted to establish a precision statement for D2042, Test Method for Solubility of Asphalt Materials in Trichloroethylene.

2. Test Method:

The Test Method used for this ILS is D2042-22. To obtain a copy of D2042, go to ASTM's website, www.astm.org, or contact ASTM Customer Service by phone at 610-832-9585 (8:30 a.m. - 6:00 p.m. Eastern U.S. Standard Time, Monday through Friday) or by email at service@astm.org.

3. Participating Laboratories:

The following laboratories participated in this interlaboratory study:

Martin Asphalt Company
300 Christy Place
South Houston, Texas 77587
USA
Hafeez Baluch

Owens Corning Asphalt Technology Lab
Maribeth Lenz
7800 W 59th street
Summit, IL 605011434
USA
Maribeth.Lenz@owenscorning.com

US Oil & Refining Co.
3001 Marshall Ave
Tacoma, Washington 98421
USA
Shauna Teclemariam
shauna.teclemariam@usor.com

Vecenergy
Kevin Hardin
300 West Middle Road
Port of Palm Beach
Riviera Beach, FL 33404
USA
Kevin.Hardin@vecenergy.com

4. Description of Samples:

There were 6 samples of varying targeted results used for this study. Each sample was prepared and distributed by Martin Asphalt. Below is a list of the samples. Samples were provided by Martin Asphalt Company, Owens Corning Asphalt Technology Lab, and US Oil & Refining Co.

1. Toluene High Level
2. Toluene Low Level
3. Toluene Mid Level
4. Trichloroethylene High Level
5. Trichloroethylene Low Level
6. Trichloroethylene Mid Level

5. Interlaboratory Study Instructions