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Weight Percent Solids in High Solids Coatings for the Maritime Industry

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Weight Percent Solids in High Solids Coatings for the Maritime Industry

Foreword

With an increasing use of ultra-high solids (UHS) and solvent-free (SF) coatings, a standardized and verified test method to provide reliable results in a practical manner is needed to measure and determine the total weight solids in coatings.

This AMPP test method aims to provide a precise and practical method to determine weight percent solids in high solids coatings.

This test method applies to coatings used during the building, operation, and maintenance of ships and maritime installations.

Rationale

Several methods for determining weight solids of coatings already exist. However, these are not adapted or verified to be suitable for accurately determining the solids contents in UHS and SF coatings.

This test method provides an accurate and practical method for determining the solids content in UHS and SF coatings. The method is established based on thorough testing and evaluation of representative models.

Referenced Standards and Other Consensus Documents

Unless specifically dated, the latest edition, revision, or amendment of the documents listed in the table below shall apply.

AMPP/NACE/SSPC, www.ampp.org:

MR21506	Universal Ultra-High Solids (UHS) and Solvent-Free (SF) Coatings Definition for the Maritime Industry

ASTM International, www.astm.org:

ASTM D2369, Method D	Standard Test Method for Volatile Content of Coatings
ASTM D1475-13	Standard Test Method for Density of Liquid Coatings, Inks, and Related Products
ASTM E145	Standard Specification for Gravity-Convection and Forced-Ventilation Ovens

International Organization for Standardization (ISO), www.iso.org:

ISO 3251	Paints, varnishes and plastics — Determination of non-volatile-matter content

Standardization Administration of China (SAC), www.sac.gov.cn:

GB/T 34682-2017	Determination of volatile organic compound (VOC) content in reactive diluent containing coatings

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