### EI/DFA research report

Compatibility of materials used in distribution handling systems with ethanol and gasoline/ethanol blends





# EI/DFA RESEARCH REPORT: COMPATIBILITY OF MATERIALS USED IN DISTRIBUTION HANDLING SYSTEMS WITH ETHANOL AND GASOLINE/ETHANOL BLENDS

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#### **FOREWORD**

This EI/DFA Research Report has been prepared for the Energy Institute's Distribution & Marketing Committee and the Downstream Fuel Association, by Dr P. Wood and K. C. Waterton of Intertek CAPCIS<sup>1</sup>.

It provides information on the compatibility of materials found within fuel distribution systems (fuel-wetted components at petroleum distribution terminals, on road tankers and at filling stations) with ethanol and ethanol/gasoline blends.

The findings of this Research Report have been endorsed by the El's Distribution & Marketing Committee and the Downstream Fuel Association, but it is recognised that they provide a review of materials compatibility knowledge available during the drafting of this report only, and it may be necessary to revisit this topic if significant advances are made in materials knowledge.

Although it is anticipated that this publication may assist those involved in the handling of ethanol and ethanol/gasoline blends, the information contained in this publication is provided for information only. While every reasonable care has been taken to ensure the accuracy of its contents, the EI, and the technical representatives listed in the acknowledgements, cannot accept any responsibility for any action taken, or not taken, on the basis of this information. The EI shall not be liable to any person for any loss or damage which may arise from the use of any of the information contained in any of its publications.

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#### 1 INTRODUCTION

Intertek CAPCIS was requested by the Energy Institute (EI) and the Downstream Fuel Association (DFA) to assist in the preparation of a joint DFA/EI publication concerning the Compatibility of materials used in distribution handling systems with ethanol and gasoline/ ethanol blends (EI Project D1004).