

GUIDANCE ON ASSESSMENT OF FLASH POINT

1.0 INTRODUCTION

There are several variations of methods for flash point specified by official ASTM methods (e.g., Pensky-Martens, Tag, Cleveland, open cup/closed cup).

Common uses of the Flash Point tests:

- Assess flammability for shipping and safety regulations; and,
- Detect presence of contamination of material by volatiles (e.g., gasoline in diesel)

2.0 COMMENTS FOR SECTIONS OF THE RATING GUIDE APPENDIX WHICH MAY BE UNIQUE TO FLASH POINT

2.1 Test Method Validation (02.01)

Method performance data: test of known compounds for accuracy, RDS of replicates, lowest and highest flash point temperature validated, inter-analyst statistics, since this test is likely operator dependent.

2.2 Test Procedure (03.01)

Procedure must be exact as detailed in the referenced ASTM method specified (the ASTM methods are very prescriptive). If any modifications are made, then variations must be justified and any impact of the variations detailed.

2.3 Sample History (03.02)

Sample handling protocols must be detailed such as storage temp., hold time.

2.4 Method Calibration (03.04)

- Control standard must be used (e.g., xylene has Flash Point of 27 degrees Celsius).
- Criteria to identify control standard nonconformance.
- Other items are not applicable.

2.5 Method QC (03.05)

- Duplicates may not be possible if the flash point is low since the second aliquot.
- may have already lost some volatile components.

- Identification of measurement uncertainty.
- Other items are not applicable.

2.6 Temperature Traceability (07.01)

Thermometers must meet the exact ASTM specifications as noted in their referenced ASTM method in addition to the usual traceability issue.