Swedish Match
Quality & Environmental Management System

Title: Determination of ZYN Moisture by HMA
Belongs to Process: Owensboro Analytical Science
Document Type: Method Description
Author: (b) (6)
Approved By: (b) (6)
Revision Approved by: (b) (6)

Issued: 3/13/2019
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Method #: (b) (4)
Supersedes: (b) (4)

DETERMINATION OF ZYN MOISTURE BY HALOGEN MOISTURE ANALYZER

Table of Contents

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Scope

The scope of this method is to quantitatively determine the amount of moisture in tobacco derived nicotine products. The sample is heated through thermal radiation to quantify the amount of moisture present in the tobacco sample through loss on drying.

Applies to

Owensboro Analytical Science

General

Principle of the method

The Halogen Moisture Analyzer uses the (b) (4) principle to determine the percent moisture in a sample. The initial mass of the sample is recorded by the instrument; the sample is then dried by (b) (4). Throughout the drying process, an integrated balance records the sample mass. (b) (4) Data is transferred directly to the (b) (4) software upon sucessful completion of each moisture measurement.

Field of Application, Range and Uncertainty of the Method

(b) (4)

Literature references

(b) (4)

Risk assessments and safety instructions

Summarized risk assessments

(b) (4)

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Equipment

Instruments and laboratory facilities

(b) (4)

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Reference material and check sample

(b) (4)

Handling of samples

Storage of sample

Finished products can be stored in the original packaging; however, if the packaging is opened in any way, (b) (4) Samples, if stored under refrigeration, should be allowed to warm to room temperature prior to sample preparation.

Preparation of sample and amount needed

(b) (4)

Analysis

Calibration and verification of instruments

(b) (4) The value should be within (b) (4). If the result of the test is outside of the control limits, retest after the suggested maintenance items listed in the Quality Assurance section below have been performed.

The date, analysts' initials, water source, temperature used, and result of the test should be recorded in the maintenance logbook for each instrument.

Procedure for analysis

(b) (4)

Ensure the instrument is set to the correct method. Method parameters are found in the Instruments and laboratory facilities section.

(b) (4)

Clean pans daily with tap water and placed in the drying oven until completely dried.

Results from measurements

Collection and storage of results

Results and other pertinent information are stored in the measurement view of the (b) (4) software. The results may also be entered manually into (b) (4)

Quality assurance

The quality assurance measures in this method are derived from the check sample. One check sample is used for quality assurance purposes. (b) (4) The quality assurance sample is tested exactly as other samples.

Control chart

(b) (4).

(b) (4)

Samples should not be analyzed when the check sample results fall into the categories listed below. In each case, retest the sample after the suggested maintenance items have been performed.

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Reporting results

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Revision History

Revision 00 – 3/13/2019

- (b) (4)

Revision 01 – 9/04/2019

- (b) (4)

Revision 02 – 10/15/2019

- (b) (4)

Responsible for method approval

Director APS

Paper copies

Paper copies of this document can be found in these places:

Location	Number	Responsible for updating
(b) (4)		

Validation

Validation report

The samples which were used in the validation study are listed below in Table 1:

Sample	Sample Type	Validation	% Moisture
(b) (4)			

Table 1: (b) (4)

Repeatability

The repeatability study consisted of six replicate determinations of the samples listed in Table 1 under repeatability conditions. (b) (4)

Precision within Lab

(b) (4)

Robustness

The robustness was determined through several experiments and is continually checked though the use of the control chart.

Robustness: Weight Variation

Measurement range and measurement uncertainty