

# ISO 8985:2022-01 (E)

## Plastics - Ethylene/vinyl acetate copolymer (EVAC) thermoplastics - Determination of vinyl acetate content

---

<b>Contents</b>		<b>Page</b>
Foreword.....		v
<b>1</b>	<b>Scope</b> .....	<b>1</b>
<b>2</b>	<b>Normative references</b> .....	<b>1</b>
<b>3</b>	<b>Terms and definitions</b> .....	<b>1</b>
<b>4</b>	<b>Reference methods</b> .....	<b>1</b>
4.1	Reference method 1: Hydrolysis and back titration.....	1
4.1.1	Principle.....	1
4.1.2	Reagents.....	2
4.1.3	Apparatus.....	2
4.1.4	Procedure.....	3
4.1.5	Expression of results.....	3
4.1.6	Test report.....	4
4.2	Reference method 2: Saponification and potentiometric titration.....	4
4.2.1	Principle.....	4
4.2.2	Reagents.....	4
4.2.3	Apparatus.....	4
4.2.4	Procedure.....	5
4.2.5	Expression of results.....	6
4.2.6	Test report.....	6
4.3	Reference method 3: Measurement of oxygen.....	6
4.3.1	Principle.....	6
4.3.2	Apparatus.....	6
4.3.3	procedure.....	7
4.3.4	Sampling.....	11
4.3.5	Calibration.....	11
4.3.6	Calculation of vinyl acetate content.....	12
4.3.7	Test report.....	12
<b>5</b>	<b>Examples of test methods</b> .....	<b>12</b>
5.1	Method using infrared spectrometry.....	12
5.1.1	Principle.....	12
5.1.2	Apparatus and materials.....	12
5.1.3	Procedure.....	13
5.1.4	Expression of results.....	15
5.1.5	Test report.....	16
5.2	Acidimetric method.....	16
5.2.1	Principle.....	16
5.2.2	Reagents and materials.....	16
5.2.3	Apparatus.....	17
5.2.4	Procedure.....	17
5.2.5	Expression of results.....	18
5.2.6	Test report.....	18
5.3	Iodometric method.....	19
5.3.1	Principle.....	19
5.3.2	Reagents.....	19
5.3.3	Apparatus.....	19
5.3.4	Procedure.....	19
5.3.5	Expression of results.....	20
5.3.6	Test report.....	20

5.4	Thermogravimetry method.....	20
5.4.1	Principle.....	20
5.4.2	Apparatus.....	21
5.4.3	Test specimens.....	21
5.4.4	Calibration.....	21
5.4.5	Procedure.....	21
5.4.6	Test report.....	22
	<b>Bibliography.....</b>	<b>23</b>