

DIN EN ISO 1628-1:2025-06 (E)

Plastics - Determination of the viscosity of polymers in dilute solution using capillary viscometers - Part 1: General principles (ISO 1628-1:2024)

Contents	Page
Foreword.....	iv
Introduction.....	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
3.1 Terms related to any liquid.....	1
3.2 Terms related to polymer solutions.....	2
4 Principle	3
4.1 General.....	3
4.2 Method A — Efflux time method.....	4
4.3 Method B — Differential pressure method.....	4
5 Apparatus	5
5.1 Efflux time method.....	5
5.2 Differential pressure method.....	8
6 Solutions	9
6.1 Preparation.....	9
6.2 Concentration.....	9
7 Temperature of measurement	10
8 Procedure	10
8.1 Efflux time method.....	10
8.1.1 General.....	10
8.1.2 Preparing and charging the viscometer.....	10
8.1.3 Efflux time measurement.....	10
8.2 Differential pressure method.....	11
8.2.1 General.....	11
8.2.2 Collection of viscosity ratio increment signal.....	11
9 Expression of results	12
9.1 Reduced viscosity and intrinsic viscosity.....	12
9.2 <i>K</i> -value.....	14
10 Test report	14
Annex A (informative) Efflux time method — Notes on sources of error	16
Annex B (informative) Differential pressure method — Notes on sources of error	20
Annex C (normative) Efflux time method — Cleaning of apparatus	22
Bibliography	23