

ISO 19252:2025-05 (E)

Plastics - Determination of scratch properties

| Contents | | Page |
|-----------------------|--|-------------|
| Foreword | | iv |
| 1 | Scope | 1 |
| 2 | Normative references | 1 |
| 3 | Terms and definitions | 1 |
| 4 | Principle | 5 |
| 5 | Apparatus | 5 |
| 5.1 | Test machine | 5 |
| 5.1.1 | General | 5 |
| 5.1.2 | Frame | 5 |
| 5.1.3 | Scratch tip | 5 |
| 5.1.4 | Test load | 5 |
| 5.1.5 | Test speed | 6 |
| 5.1.6 | Test specimen support | 6 |
| 5.1.7 | Force indicator | 6 |
| 5.1.8 | Scratch-tip displacement gauge | 6 |
| 5.2 | Instruments for measuring the test specimen dimensions | 6 |
| 5.3 | Monitoring and inspection devices (optional) | 6 |
| 5.3.1 | Monitoring device | 6 |
| 5.3.2 | Scratch inspection device | 6 |
| 6 | Test specimens | 7 |
| 6.1 | Shape and dimensions | 7 |
| 6.2 | Preparation | 7 |
| 6.2.1 | Moulding | 7 |
| 6.2.2 | Inspection of specimens and measurement of specimen dimensions | 7 |
| 6.3 | Number of test specimens | 7 |
| 6.4 | Conditioning | 7 |
| 7 | Procedure | 8 |
| 7.1 | Test atmosphere | 8 |
| 7.2 | Scratch test | 8 |
| 7.2.1 | General | 8 |
| 7.2.2 | Scratch tip | 8 |
| 7.2.3 | Test load | 8 |
| 7.2.4 | Test speed | 9 |
| 7.2.5 | Test direction | 10 |
| 7.2.6 | Clamping | 10 |
| 7.2.7 | Testing | 10 |
| 7.2.8 | Recording of data | 10 |
| 7.2.9 | Monitoring of scratch behaviour and inspection of the scratched surface (optional) | 10 |
| 8 | Expression of results | 11 |
| 8.1 | General | 11 |
| 8.2 | Determination of type of scratch behaviour | 11 |
| 8.3 | Creation of scratch map | 11 |
| 8.4 | Determination of critical normal load | 12 |
| 9 | Test report | 14 |
| Annex A (informative) | Photographic illustrations of different types of scratch behaviour | 16 |
| Annex B (informative) | Example of a test machine | 17 |
| Bibliography | | 18 |