

ISO 9370:2017-04 (E)

Plastics - Instrumental determination of radiant exposure in weathering tests - General guidance and basic test method

| Contents | | Page |
|---|--|-------------|
| Foreword | | iv |
| Introduction | | v |
| 1 | Scope | 1 |
| 2 | Normative references | 1 |
| 3 | Terms and definitions | 2 |
| 4 | Significance and use | 6 |
| 4.1 | General considerations | 6 |
| 4.2 | Natural weathering -- Fixed-angle or equatorial-mount exposure | 7 |
| 4.3 | Accelerated natural weathering -- Solar-concentrating exposures using Fresnel-reflecting concentrators | 7 |
| 4.4 | Artificial accelerated weathering and artificial accelerated irradiation | 7 |
| 5 | Apparatus | 8 |
| 5.1 | General | 8 |
| 5.2 | Non-selective radiometers (see Table 1) | 10 |
| 5.3 | Selective (UV) radiometers (see Table 2) | 10 |
| 5.4 | Recorders and data loggers | 11 |
| 6 | Calibration | 11 |
| 6.1 | General | 11 |
| 6.2 | Reference and field radiometers | 12 |
| 6.3 | Selective reference radiometers | 12 |
| 6.4 | Selective field radiometers | 13 |
| 6.5 | Other requirements | 13 |
| 7 | Procedure | 13 |
| 7.1 | Natural weathering -- Fixed-angle or equatorial-mount exposure | 13 |
| 7.2 | Accelerated natural weathering -- Solar concentrating exposures using Fresnel-reflecting concentrators | 14 |
| 7.3 | Artificial accelerated weathering or artificial accelerated irradiation | 14 |
| 8 | Exposure report | 14 |
| Annex A (informative) Comparison of typical wide-band UV radiometers | | 16 |
| Annex B (informative) Spectral mismatch of selective filter radiometers | | 17 |
| Bibliography | | 20 |