

ISO 30013:2011-10 (E)

Rubber and plastics hoses - Methods of exposure to laboratory light sources - Determination of changes in colour, appearance and other physical properties

Contents		Page
Foreword		iv
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Principle	2
5	Test pieces	2
5.1	Types of test piece	2
5.2	Conditioning	3
5.3	Number of test pieces	4
5.4	Test piece holders	4
5.5	Radiation direction and radiation surface	4
6	Light sources and exposure cycles	7
6.1	General	7
6.2	Xenon-arc lamps	7
6.3	Fluorescent UV lamps	10
6.4	Open-flame carbon-arc lamps	12
7	Procedure	14
7.1	General	14
7.2	Mounting the test pieces	14
7.3	Exposure	14
7.4	Measurement of radiant exposure	15
7.5	Removal and inspection of test pieces	15
8	Expression of results	16
8.1	Cracking and appearance	16
8.2	Changes in colour	16
8.3	Changes in physical properties	16
9	Test report	16
Annex A (informative) Properties for assessing changes in hose materials after exposure		18
Annex B (informative) Guidance on selection of light sources		19
Annex C (informative) Recommended types of test piece for determining typical properties		20
Bibliography		21