



TESTING AND MEASURING EQUIPMENT/ALLOWED SUBCONTRACTING

Electric toys – Safety

IEC62115 1. Edition (2003)+ Am.1 (2004)

R=Required by Lab

S=May be subcontracted

Clause	Measurement/testing	Testing / measuring equipment / material needed	Subcontracting
3	Definition	Scale to check Normal load between 25Kg and 50Kg, Probe 18 or 19 of IEC61032	R
5	General conditions for the tests	Test apparatus according to ISO8124-1	R
7	Marking and instructions	Petroleum Spirit, Water	R
8	Power input	Voltmeter, wattmeter or Power analyzer	R
9	Heating and abnormal operation	Test corner, four layers of bleached cotton gauze(500mm x 500mm, 40 g/m ² ±8 g/m ²) Straight steel pin(0.5mmφ, 25 mm length at least or 1.0mmφ, 100 mm length at least) Temperature Recorder, fine wire thermocouples Apparatus for low power circuit determination.	R R R R
10	Electric strength at operating temperature	HV test facilities(250 V, 50Hz or 60 Hz)	R
11	Moisture resistance	IPX4 Test apparatus according to IEC60529(Oscillating hoop IP test equipment, measurement beaker, splay nozzle) Humidity cabinet (93±3%)	R R
12	Electric strength at room temperature	HV test facilities(250 V, 50Hz or 60 Hz)	R
13	Mechanical strength	Impact hammer,(0.7J)	R
14	Construction	Steel plate, Cylindrical metallic mass(80 mm φ, 1 Kg) Pull force gauge(50N and 90 N)	R R
16	Components	Laboratory may or may not have facilities for testing to component standards. Certification by specialist laboratories is accepted for compliance	S
17	Screws and connections	Torque gauge	R
18	Clearances and creepage distances	Mechanical measurement tools, Rod and ball gauges	R
19	Resistance to heat and fire	Ball pressure test apparatus according to IEC60695-10-2 Glow-wire test apparatus IEC60695-2-11 Needle flame test apparatus according to IEC60695-2-2	R R R
20	Toxicity and similar hazards	Test apparatus according to ISO 8124-3 and lasers and light emitting diodes(IEC 60825-1)	S
Annex B	Needle-flame test	Needle-flame test apparatus	R
Annex C	Automatic controls and switches	Laboratory may or may not have facilities for testing to component standards. Certification by specialist laboratories is accepted for compliance	S
Annex E	Lasers and light emitting diodes	Test apparatus according to IEC60825-1	S



IEC SYSTEM FOR CONFIRMITY TESTING AND
CERTIFICATION OF ELECTRICAL EQUIPMENT

COMMITTEE OF TESTING LABORATORIES



Note: The presence of equipment alone does not indicate a satisfactory situation. Assessors must evaluate the equipment design, calibration, uncertainty and documentation to ensure compliance with the directions of the standard. The requirements of ISO Guide 25 regarding validation are applicable, as the tests of this standard are not standardized tests.