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IEC 60754 Part 1 and Part 2 TEST ON GASES EVOLVED DURING COMBUSTION OF ELECTRIC CABLES



The International Electrotechnical Commission IEC 60754 Part 1 and Part 2 test is performed to determine the degree of acidity of gases evolved during the combustion of materials taken from electric cables by measuring the pH & conductivity.

Cable users have expressed concern over the amount of acid gas which is evolved when cable insulating, sheathing and other materials are burnt as this acid can cause extensive damage to electrical and electronic equipment not involved in the fire itself. It has been considered necessary, therefore, to develop an approved method (by extensive round robins) for determining the amount of acid gases evolved by burning cable components so that limits can be agreed for cable specifications. As the test is not carried out on a complete cable test piece, for a hazard assessment the actual material volumes of the cable components should be taken into consideration.

INSTRUMENT FEATURES

- Tube furnace, support stand and thermocouples
- Quartz work tube and sample lading assembly
- Control unit with digital temperature controller for tube furnace, optional over temperature device and sample temperature indicator
- 2 gas collection bottles
- Gas cell 1 litre
- pH and conductivity measuring instruments with digital display and electrodes
- Stirrer
- Air flowmeter and all necessary tubes and connections
- 10 ceramic sample boats