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## No. 606 Candle Type Flammability Tester, Model D (Oxygen Indexer)



### **APPLICATION**

Evaluates and indicates oxygen index according to the amount of oxygen required to start burning. Also permits measurement of temperature inside the column.

The model D Flammability Tester is a modified version of the previous model, modified to achieve higher accuracy (0.1% indication) in accordance with the ISO standard. It employs a mass flow controller in the oxygen and nitrogen gas control sections, which permits digital indication of oxygen index, reading of oxygen index with a least count of 0.1%, direct setting of oxygen index by a dial, digital indication of temperature inside the column and digital indication of oxygen and nitrogen flow rates, etc. Moreover, a function of data processing by computer through an interface circuit can also be added as an option.

## SPECIFICATIONS

Combustion unit	1) Column: Heat-resistant glass, internal dia. $\phi$ 75mm, height 450mm 2) Glass beads: Approx. $\phi$ 4mm 3) Specimen holder: Stainless steel (Standard holder: for method A) 4) Gas flow rate: 4cm/sec. $\pm$ 1cm/sec. in the column
Measurement unit	1) Flow rate control: Thermal mass flow controller, 0~10l/min. ( $N^2$ , $O^2$ ) 2) Flow rate setting: Manual setting of oxygen concentration by O.I. setting dial and automatic setting by amplifier and computing circuits 3) O.I. indication: Digital indication, $N^2$ and $O^2$ flow rates of set O.I. value also indicated by selector switch
Pressure control unit	1) Pressure gauge: 0~0.3MPa 2) Cut-off valve: Magnetic valve
Oxygen index indication	6~94%
Temperature indication	Maximum 199.9°C
Testing method	JIS D 1201, K 7201, ASTM D2863, ISO 4589
Gas supplies required	Oxygen, Nitrogen, LPG (for ignition)
Electrical	AC100V, 1-P, 200VA (Other voltages also possible)
Dimensions	1) Main body: 30(W) x 30(D) x 52(H)cm 2) Measurement unit: 44(W) x 38(D) x 15(H)cm 3) Pressure control unit: 44(W) x 38(D) x 20(H)cm
Net weight	Approx. 30kg

## PLASTIC FLAMMABILITY MEASUREMENT EXAMPLES

Name of resin	$O^2$ (%)	Name of resin	$O^2$ (%)
Methacrylic resin	17.3	ABS resin (4mm thickness)	18.4
Polyethylene (low density)	17.8	AS resin	18.5
Polyethylene (high density)	17.4	Polypropylene	17.7
Polyethylene (GP)	18.2	Polyacetal	15.4
Polyethylene (HI)	18.1	Phenol resin	29.4
ABS resin (1mm thickness)	17.7	Polyurethane	24.4
ABS resin (2mm thickness)	17.8	Polycarbonate	25.1
ABS resin (3mm thickness)	18.8		