#### **HEAT OF COMBUSTION**

### ASTM D240 IP 12 HEAT OF COMBUSTION OF LIOUID HYDROCARBON FUELS BY BOMB CALORIMETER

This test method covers the determination of the heat of combustion of liquid hydrocarbon fuels ranging in volatility from that of light distillates to that of residual fuels.

# ASTM D4809 ASTM D2382 (obs) HEAT OF COMBUSTION OF LIQUID HYDROCARBON FUELS BY BOMB CALORIMETER (PRECISION METHOD)

This test method covers the determination of the heat of combustion of hydrocarbon fuels. It is designed specifically for use with aviation turbine fuels when the permissible difference between duplicate determinations is of the order of 0.2 %. It can be used for a wide range of volatile and nonvolatile materials where slightly greater differences in precision can be tolerated.

# ASTM D5865 ASTM D3286 (obs) GROSS CALORIFIC VALUE OF COAL AND COKE

This test method pertains to the determination of the gross calorific value of coal and coke by either an isoperibol or adiabatic bomb calorimeter.

# ISO 1716 REACTION TO FIRE TESTS FOR PRODUCTS -- DETERMINATION OF THE GROSS HEAT OF COMBUSTION (CALORIFIC VALUE)

Method for the determination of the gross heat of combustion of products at constant volume in a bomb calorimeter.

# ASTM D129 IP 61 DIN 51577 SULFUR IN PETROLEUM PRODUCTS (GENERAL BOMB METHOD)

This test method covers the determination of sulfur in petroleum products, including lubricating oils containing additives, additive concentrates, and lubricating greases that cannot be burned completely in a wick lamp. The test method is applicable to any petroleum product sufficiently low in volatility that it can be weighed accurately in an open sample boat and containing at least 0.1% sulfur.

# ASTM D808 CHLORINE IN NEW AND USED PETROLEUM PRODUCTS (BOMB METHOD)

This test method covers the determination of chlorine in lubricating oils and greases, including new and used lubricating oils and greases containing additives, and in additive concentrates. Its range of applicability is 0.1 to 50 m% chlorine.

Capacity 300ml, completely made of stainless steel included the two electrodes, cover with threaded displacing ring, gasket around the cover edge, an automatic inlet valve, a pin exhaust valve. Tested at 200 bar/20 MPa.

Technical specifications:

- Dimensions: Ø10x22 cm

- Weight: 4.5 kg

### 2060 CYLINDER MAHLER

Handle for extraction, 2 sectors polycarbonate cover with holes for the passing of stirrer, blade stirrer, motor stirrer 100 rpm 24V with support, double pliers for thermometer, connection for Mahler bomb electrodes. The vessel is fitted with ignition device including: low voltage outlet, start pushbutton, 24V socket for motor stirrer, ammeter.

Technical specifications:

- Power supply: 230V  $\pm 10\%$  50/60Hz

- Dimensions: 40x40x82 cm

- Weight: 29 kg

### 2070 CALORIMETER VESSEL

CONSUMABLES x 2 YEARS		
10-2061/A	QUARTZ DISH	
	Cap.3 ml	
10-2067	BENZOIC ACID FOR PASTILS, pack of 100 g	
10-2068	BENZOIC ACID PASTILS, pack of 10 pcs	
	1 g ±0.1	
10-2071/A	IGNITION WIRE CHROMEL C, 5 m.,	
	pack of 10 pcs	
10-2071/B	PLATINUM IGNITION WIRE, 10 cm.	
10-20/1/B	PLATINUM IGNITION WIRE, 10 cm.	

SPARE PART	S
15-PINR1	PLIERS
15-2070/VAS	INTERNAL VESSEL
15-2070/COP	POLYCARBONATE COVER
15-0004	BIPOLAR GREEN SWITCH
15-0005	BIPOLAR YELLOW SWITCH
12-0010	MOTOR STIRRER 100 RPM 24V
15-0044	AMMETER 0-5A

ACCESSORIES ON REQUEST		
2470/BCA200	) ANALYTICAL BALANCE	
	Range 220 g., readout 0.0001, pan Ø80	
10-2061/A	QUARTZ CRUCIBLE	
	Cap.3 ml.	
10-2061/B	STAINLESS STEEL CRICIBLE	
10-2061/C	CRUCIBLE IP 12	
	made of stainless steel AISI 316 (25/20)	
	without rim	
10-2063	REDUCER GEAR	
	For O <sub>2</sub> , with pressure gauge, safety valve and	
	junction Hy-Flex for high pressure L=150 cm	
10 2064	1/4"-3/8"	
10-2064	SUPPORT FOR COVER PRESS FOR PASTILS	
10-2065 10-2067		
10-2067	BENZOIC ACID PASTILS, pack of 100 g	
10-2000	1 a ±0.1	
10-2074	SIEVE	
10 207 1	ASTM 70 mesh, Ø100 mm	
10-2071/A	IGNITION WIRE CHROMEL C, 5 m.,	
,	pack of 10 pcs	
10-2071/B	PLATINUM IGNITION WIRE, 10 cm.	
10-0332	DIGITAL STOPWATCH	
	7 digit LCD, max.10 hours, 1/100 sec,	
	digit h=8 mm	
T-AS116C	THERMOMETER ASTM 116C	
T-AS117C	THERMOMETER ASTM 117C	
T-AS56C	THERMOMETER 56C	
T-BECK	BECKMANN THERMOMETER	
	6-6.5:0.01, UPPER PART 420 mm	