

# FREEZING POINT

## ASTM D2386 IP 16 ISO 3013 DIN 51421 (obs) FREEZING POINT OF AVIATION FUELS

*This test method covers the determination of the temperature below which solid hydrocarbon crystals may form in aviation turbine fuels and aviation gasoline.*

### 2370 MANUAL FREEZING POINT

Consisting of: tripod stand with clamp the jacketed sample tube into the Dewar flask at the level required from method; Dewar flask Ø75x280 mm. int. for cooling medium, with stainless steel support; jacketed sample tube Dewar Ø20x234 mm. int.; silicone stopper with hole for thermometer and supporting the brass moisture-proof collar (with silica gel and glass wool) through which the manual brass stirrer passes.

### 2370/SEM SEMI-AUTOMATIC FREEZING POINT

Base painted with anti-acid epoxidic products supporting Dewar flask Ø75x280 mm. int. for cooling medium, with stainless steel support; jacketed sample tube Dewar Ø20x234 mm. int.; cork stopper with two holes one for thermometer and one for supporting the brass moisture-proof collar (with silica gel and glass wool) through which the manual brass stirrer passes joined to a geared motor for automatic stirrer at 70 rpm. The base accommodate the stirrer switch.

Technical specifications:

- Power supply: 230V ±10% 50 Hz
- Dimensions: 26x35x115 cm
- Weight: 11 kg

### 2370/SEM/2 SEMI-AUTOMATIC FREEZING POINT (2 POSITIONS)

2 places stand-alone with base painted with anti-acid epoxidic products supporting two Dewar flask Ø75x280 mm. int. for cooling medium, with stainless steel support, each with; jacketed sample tube Dewar Ø20x234 mm. int.; cork stopper with two holes one for thermometer and one for supporting the brass moisture-proof collar (with silica gel and glass wool) through which the manual brass stirrer passes joined to a geared motor for automatic stirrer at 70 rpm. The base accommodate two stirrer switch.

Technical specifications:

- Power supply: 230V ±10% 50 Hz
- Dimensions: 60x40x115 cm
- Weight: 38 kg



### ACCESSORIES ON REQUEST

T-AS114C THERMOMETER ASTM 114C IP 14C

### CONSUMABLES x 2 YEARS

15-2371 JACKETED SAMPLE TUBE x2  
Internal Ø20x234 mm, similar Dewar  
15-2372 WIRE STIRRER x4  
Made of brass, with three-loop spiral at the bottom

### SPARE PARTS

15-2374 STOPPER, PACK OF 2 PCS  
Made of silicone with two holes: one for thermometer and one for stirrer  
15-2375 MOISTURE-PROOF  
Collar through which the stirrer passes  
Made of brass, filled with silica gel and glass wool  
15-2373 DEWAR Ø75x280 mm  
15-2384 CLAMP  
15-2070/MOR DOUBLE CLAMP  
15-0004 BIPOLAR GREEN SWITCH  
12-0014/M MOTOR  
15-AZLAM3 CARD MOTOR, 3A



# FREEZING POINT

## ASTM D1177 FREEZING POINT OF AQUEOUS ENGINE COOLANTS

*This test method covers the determination of the freezing point of an aqueous engine coolant solution in the laboratory.*

Base painted with anti-acid epoxidic products supporting Dewar flask Ø100x290mm. int. for cooling medium, fully silvered with metal protection; 200 mL freezing tube Dewar; cork with three holes one for PT100A probe one for stirrer and one for introducing wire for seeding; five coil stirrer made of stainless steel wire joined to a geared motor for automatic stirrer at 70 rpm.  
The base accommodate the main switch, stirrer switch and digital thermometer plug in to PT100A probe.

### 2380 FREEZING POINT

Technical specifications:  
- Power supply: 230V ±10% 50Hz  
- Dimensions: 26x35x85 cm  
- Weight: 8 kg

### 2380/2 FREEZING POINT (2 POSITIONS)

Technical specifications:  
- Power supply: 230V ±10% 50Hz



### CONSUMABLES x 2 YEARS

15-2381	FREEZING TUBE x2 200 ml., Dewar
15-2382	WIRE STIRRER x4 Made of stainless steel, with five-loop spiral at the bottom
15-2383	STOPPER, pack of 2 pcs Made of cork, with 3 holes

### SPARE PARTS

15-2385	DEWAR
14-0002	PROBE PT100A
16-0005	DIGITAL THERMOMETER
15-0004	BIPOLAR GREEN SWITCH
15-0005	BIPOLAR YELLOW SWITCH
15-2384	CLAMP
12-0014/M	MOTOR
15-AZLAM3	CARD MOTOR, 3A

Resistant structure painted with anti-acid epoxidic products, fitted with 4 wheels with brake. Glossy-black PVC cover with small stand-by covers aluminium block with 1 hole for accommodate the 200ml freezing tube, equipped with a hole where the thermometer is placed, heating element controlled by a independent switch for a quick return to a ambient temperature. Temperature is controlled by digital thermoregulator fitted with a probe PT100 A. Automatic defrosting device under the cover, earth leakage circuit breaker, double stage compressor CFC free refrigerant gases are used.

Consisting of: 200ml freezing tuber; cork with three holes one for PT100A probe one for stirrer and one for introducing wire for seeding; five coil stirrer made of stainless steel wire joined to a geared motor for automatic stirrer at 70 rpm.

The temperature of sample is obtain by a PT100A probe plug in to a digital thermometer.

Technical specifications:

- Temperature: from ambient to -70°C (-94°F)
- Power supply: 230V ±10% 50Hz
- Power: 1300W
- Dimensions: 60x70x160 cm
- Weight: 118 kg

### 2380/SEM SEMI-AUTOMATIC FREEZING POINT

#### CONSUMABLES x 2 YEARS

15-2381	FREEZING TUBE x2 200 ml., Dewar
15-2382	WIRE STIRRER x4 Made of stainless steel, with five-loop spiral at the bottom
15-2383	STOPPER, pack of 2 pcs Made of cork, with 3 holes

#### SPARE PARTS

11-0490	HEATER
14-0002	PROBE PT100A
14-0006	PROBE PT100A (for refrigerator bench)
16-0005	DIGITAL THERMOMETER
11-0018	DEFROSTING HEATER 15W
15-0004	BIPOLAR GREEN SWITCH
15-0005	BIPOLAR YELLOW SWITCH
15-2384	CLAMP
12-0014/M	MOTOR
15-AZLAM3	CARD MOTOR, 3A
15-0019	EARTH LEAKAGE CIRCUIT BREAKER
15-0021	TIMER