

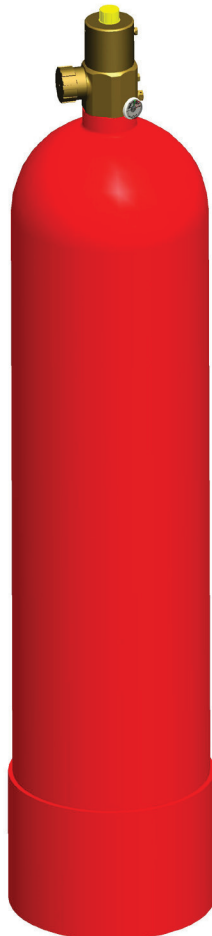
## SECTION 2 - SYSTEM COMPONENTS

### System Components

This section describes the individual components that comprise a complete system. Some items are optional depending on the application, and are indicated as such.

#### SAPPHIRE Container & Valve Assembly

The container assembly consists of a container fitted with a valve and internal syphon tube, factory filled with Novec™ 1230, and super-pressurised with dry nitrogen to 25 bar @ 21 °C (360 psi @ 70 °F). Containers sharing the same manifold shall be equal in size and fill density. Containers are finished in red and are available in various sizes. A nameplate is fixed to the container displaying the agent weight, tare weight, gross weight, fill density, charge date and fill location.



#### Container & Valve Assembly Technical Information

Nominal Working Pressure: 25.0 bar (360 psi)  
at 21 °C (70 °F)  
Max. Working Pressure: 29.2 bar (423.5 psi)

#### Container Technical Information

The 34, 80, 120, 120\*, 140 and 180 litre containers are manufactured in accordance with IS:7285 (Pt 2) under BIS with CCOE approval.

Material: Carbon Steel

#### 34L Container

Hydraulic Test Pressure: 250 bar (3625.9 psi)  
Working Pressure: 150 bar (2175.6 psi)

#### 80L Container

Hydraulic Test Pressure: 250 bar (3625.9 psi)  
Working Pressure: 150 bar (2175.6 psi)

#### 120L Container

Hydraulic Test Pressure: 200 bar (4844.3 psi)  
Working Pressure: 150 bar (2900.8 psi)

#### 120L Container\*

Hydraulic Test Pressure: 334 bar (4844.3 psi)  
Working Pressure: 200 bar (2900.8 psi)

#### 140L Container

Hydraulic Test Pressure: 200 bar (4844.3 psi)  
Working Pressure: 150 bar (2900.8 psi)

#### 180L Container

Hydraulic Test Pressure: 200 bar (4844.3 psi)  
Working Pressure: 150 bar (2900.8 psi)

Paint Specification: Epoxy primer  
Red urethane top coat

\* Only available to Special Order.

Figure 1 - SAPPHIRE Container & Valve Assembly

## SECTION 2 - SYSTEM COMPONENTS

Table 4: Container &amp; Valve Assembly Details

Part No.	Nominal Volume	Nominal Tank Size	Minimum and Maximum Fills kg (lb)	Valve Size mm (in.)	Height from floor to outlet (nominal) mm (in.)	Diameter mm (in.)	Nominal Tare Weight kg (lb)
442639	34 litre	90 lb	17 to 40.8 (37 to 90)	25 (1)	865 (34.0)	267 (10.5)	52 (114)
570839	80 litre	210 lb	40 to 96 (88 to 211)	50 (2)	1794 (70.6)	267 (10.5)	91.5 (202)
442640	120 litre	320 lb	60 to 144 (132 to 317)	50 (2)	1317 (51.9)	406 (16)	143 (316)
570840*	120 litre	320 lb	60 to 144 (132 to 317)	50 (2)	1595 (62.8)	356 (14)	135.2 (298)
442641	140 litre	370 lb	70 to 168 (154 to 370)	50 (2)	1492 (58.8)	406 (16)	180 (398)
442642	180 litre	476 lb	90 to 216 (198 to 476)	50 (2)	1837 (72.3)	406 (16)	213 (469)

\* Only available to Special Order.

Table 5: Container - Valve Equivalent Lengths

Part No.	Nominal Volume	Nominal Tank Size	Equivalent Lengths m (ft)
442639	34 litre	90 lb	6.096 (20)
570839	80 litre	210 lb	10.668 (35)
442640	120 litre	320 lb	10.668 (35)
570840*	120 litre	320 lb	10.668 (35)
442641	140 litre	370 lb	10.663 (35)
442642	180 litre	476 lb	10.663 (35)

\* Only available to Special Order.

## SECTION 2 - SYSTEM COMPONENTS

### Container Label

The container label details the weight of Novec™ 1230 contained, empty weight, fill density and charge date. Once the label is applied to the container surface, and to avoid possible tampering it can not be removed intact.

### Technical Information

Material:	Aluminum
Adhesive:	Pre-applied 3M adhesive 9485
Certification:	UL Recognised
Overall Size:	241.3 mm x 165.1 mm (15 in. x 6.5 in.)
Weight:	0.0416 kg (0.092 lb)

**INSPECTION OF SUPPRESSION SYSTEM**

**MONTHLY**

-EXAMINE PIPING AND NOZZLES TO MAKE CERTAIN THEY ARE UNOBSTRUCTED.

-CHECK TANK PRESSURE. IF LOSS EXCEEDS 10% (WHEN ADJUSTED FOR TEMPERATURE), REFILL OR REPLACE TANK.

**6-MONTH**

-CHECK AGENT QUANTITY AND PRESSURE. REFILL OR REPLACE IF A LOSS IN AGENT QUANTITY OF MORE THAN 5% OR A LOSS IN PRESSURE (ADJUSTED FOR TEMPERATURE) OF MORE THAN 10% IS DETERMINED.

REFER TO ANSUL MANUAL, PART NO. 570805, (AVAILABLE FROM TYCO FIRE PROTECTION PRODUCTS), AND NFPA 2001, FOR ADDITIONAL INSPECTION AND MAINTENANCE INSTRUCTIONS. THIS SYSTEM IS MADE UP OF UNITS TESTED WITHIN LIMITATIONS CONTAINED IN THE DETAILED INSTALLATION MANUAL. THE SYSTEM SHOULD BE PERIODICALLY INSPECTED BY TRAINED PERSONNEL. THE SYSTEM DESIGNER MUST BE CONSULTED WHENEVER CHANGES ARE PLANNED FOR THE SYSTEM OR AREA OF PROTECTION.

**SAPPHIRE CLEAN-AGENT FIRE SUPPRESSION SYSTEM UNIT**

**▲ WARNING!**

THE DISCHARGE OF CLEAN AGENT SYSTEMS TO EXTINGUISH A FIRE CAN RESULT IN A POTENTIAL HAZARD TO PERSONNEL FROM THE NATURAL FORM OF THE CLEAN AGENT OR FROM THE PRODUCTS OF COMBUSTION THAT RESULT FROM EXPOSURE OF THE AGENT TO THE FIRE OR HOT SURFACES. UNNECESSARY EXPOSURE OF PERSONNEL EITHER TO THE NATURAL AGENT OR TO THE PRODUCTS OF DECOMPOSITION SHALL BE AVOIDED.

**▲ WARNING!**

UNCONTROLLED VALVE OPERATION COULD RESULT IN SEVERE INJURY OR DEATH TO OPERATORS OR BYSTANDERS. ENSURE SAFETY OUTLET CAP IS IN PLACE IF CONTAINER IS DISCONNECTED FROM PIPEWORK. CONTAINERS SHOULD NOT BE POSITIONED IN DIRECT SUNLIGHT.

**♻️ RECYCLING PROTECTS THE ENVIRONMENT**

DO NOT DISPOSE, DISCHARGE ONLY IN CASE OF FIRE. IF CONTAINER CONTENTS MUST BE REMOVED FOR SERVICE, MAINTENANCE OR DISMANTLING OF THE CLEAN AGENT SYSTEM - PRIOR TO REMOVAL, CONTACT YOUR LOCAL INSTALLER OR MANUFACTURER FOR INSTRUCTIONS ON HANDLING EQUIPMENT AND ON RECLAIMING OR RECYCLING CLEAN AGENT.

DO NOT COVER, REMOVE OR DEFACE THIS LABEL

**ANSUL**

LABEL YC157084

SUITABLE FOR USE IN AMBIENT TEMPERATURES OF 0 °C TO 54 °C (32 °F TO +130 °F)

TANKS MUST BE INSTALLED AND STORED IN THE VERTICAL POSITION

CYLINDER TEST PRESSURE IS 1.67 TIMES WORKING PRESSURE PER IS 7285 (PART 2): 2004.

**PART NO.**

NOVEC 1230 FLUID WEIGHT: kg (LB.)

GROSS WEIGHT: kg (LB.)

FILL LOCATION: IN-

CHARGE DATE:

3M™ NOVEC™ 1230 FIRE PROTECTION FLUID, HMS 0-0-1/1FK6-1-12, SEE WARNINGS ON PRODUCT LABEL/CONTENTS. UNDER PRESSURE, NITROGEN EXPELLANT GAS HMS 0-0-0/0-0-0. COLD DISCHARGE - CONTENTS UNDER HIGH PRESSURE. CONSULT TYCO FIRE PROTECTION PRODUCTS, ONE STANTON STREET, MARINETTE, WI 54143-2542, EMERGENCY PHONE 800-364-3577 FOR MSDS.

TYCO FIRE PROTECTION PRODUCTS  
ONE STANTON STREET  
MARINETTE, WI 54143-2542

Figure 2 - Container Label (Part No. 570804)