

CRITICAL CARE FOR CRITICAL NEEDS BLOOD BANK REFRIGERATORS

Godrej Blood Bank Refrigerators with Sure Chill® technology ensure perfect temperature control with no risk of freezing.



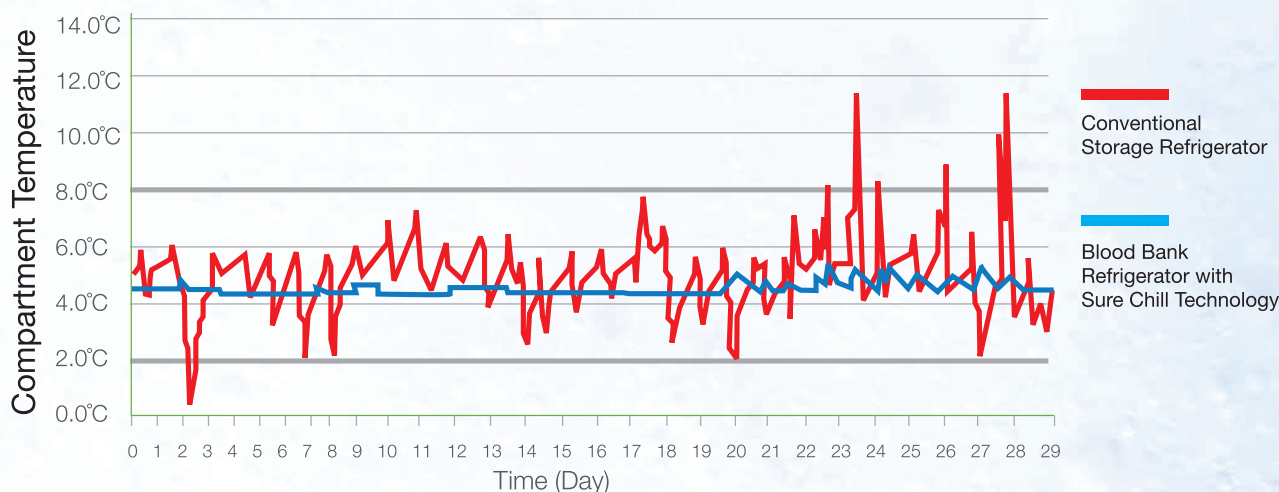


Why choose Godrej Blood Bank Refrigerators with Sure Chill® technology?

- **Precise cooling capability:** The whole blood and red blood must always be stored at a temperature of +2 to +6 deg Celsius to maintain blood's oxygen carrying ability and to prevent red cell membrane rupture. Sure Chill's unique technology limits the temperature variation in the cabinet to less than 1°C.
- **Minimises thermal shock:** Damage can occur to blood bags through a single exposure to heat when there is a power outage. It can also occur through several short exposures to heat when standard equipment fails to meet the twin challenges of high ambient temperatures and unreliable electricity supply. Our blood bank refrigerators are different. They deliver outstanding performance with as little as 2½ hours of electricity per day at high ambient temperatures. If the power goes off completely, our blood bank refrigerators can keep blood bags at a safe temperature for 7 days or more, even with the refrigerator being in normal use.
- **Patented Sure Chill Technology:** Sure Chill works on the principle that water is at its densest at 4°C. Water, not ice, surrounds a Sure Chill refrigeration compartment. When power is supplied to the refrigerator, the water cools and ice is formed above the compartment leaving only water at 4°C cooling the contents. When the power is switched off, the water warms and rises while the ice begins to melt. This keeps only water at a perfect 4°C cooling the contents of the compartment. The system can operate like this, without any power whatsoever, for many days.
- **A sound investment:** People depend on blood banks for safe blood. For blood banks to consistently play the role of a life saving enabler, one needs to invest in a reliable storage device.

A related but independent study confirms that for storage Sure Chill technology provides dependable cooling with negligible temperature variation.

Compartment temperature monitoring with the refrigerator in normal use.



Godrej blood bank refrigerators with Sure Chill technology are based on WHO PQS approved refrigerators. When them, the integrity of blood is safeguarded.

A similar study was performed with the refrigerator in holdover, i.e. no power supply to a fully charged refrigerator. This produced similar results and moreover repeated opening of the door did not result in a significant reduction in the holdover time.

Conclusion

Data obtained during this study indicates that Precooled Unseparated Blood stored in our Blood Bank refrigerator with upright front opening door are not subjected to thermal shock on opening of the door in high ambient temperatures.

GBR 50AC



GBR 100AC



GBR 225AC



Key Features

- Holdover time of more than 7 days
- Environment friendly - CFC, HFC and HCFC free
- Sure Chill technology guarantees not to freeze any stored contents
- Built-in intelligent temperature control, early warning and energy management system
- Refrigerator continues to operate on only 2.5 hrs of power per day and refrigerator to operate at an ambient temperature of 43°C post stabilisation
- Comes with a provision of fully digitized circular chart recorder with digital display, in-built alarm and battery backup of 24 hours

Product Features:

1. General

- Blood bank refrigerators powered by mains electricity

2. Performance

- Minimises thermal shock during usage compared to conventional chest refrigerators
- Operating temperature range: +10°C to +43°C
- Voltage and frequency: 220-240V 50/60 Hz
- Guaranteed never to freeze contents with patented Sure Chill technology

3. Built-in Features

- Display Thermometer: Externally readable digital display thermometer
- Stabiliser: Operating range 160-270V

4. Additional Features

- Front opening for easy stock management
- Corrosion resistant: Epoxy Polyester (EPO) coated Galvanized Steel Outer Cabinet.
- Fitted with two latch locks for use with a padlock
- Designed for easy maintenance and repair
- 2 year of warranty

5. Specifications

PARAMETERS	GBR 50AC	GBR 100AC	GBR 225AC
Refrigerator Dimensions (HxLxD)	1220 x 795 x 750mm	1820 x 795 x 750mm	1820 x 795 x 750mm
Number of bins	2	3	10
Gross Storage Capacity	57.7 Ltr	121 Ltr	276 Ltr
Energy Consumption, Stable Running	0.56 kWh/ 24 hours	0.75 kWh/ 24 hours	2.041kWh/ 24 hours
Blood Bag Storage (unseparated, 350 ml)	54	81	180
Energy Consumption, Cool Down Test	0.64 kWh/ 24 hours	1.90 kWh/ 24 hours	2.32 kWh/ 24 hours
Refrigerant	R600a	R600a	R600a
Net Weight	96 Kg	125 Kg	125 Kg
Gross Weight	125 Kg	160 Kg	160 Kg
Quality Standard	ISO 9001:2008	ISO 9001:2008	ISO 9001:20087
Hold over time	5-7+days	8-12+days	2-3+Days
Stuffing Quantity (20' Container)	21	21	21
Stuffing Quantity (40' Container)	42	42	42

GBR 100DC SOLAR DIRECT



GBR 50DC SOLAR DIRECT



Key Features

- Solar Direct Drive Refrigerator
- Easy to use plug and play solar panels
- Does not rely on batteries to store energy during periods of no power
- Sure Chill technology guarantees never to freeze any stored content
- Environment friendly - CFC, HFC and HCFC free
- WHO pre-qualified. Ambient temperature rated +10°C to +43°C.
- Built-in intelligent temperature control, early warning and energy management system

Rated Grade A - Freeze Protection by WHO

Product Features:

1. General

- Solar Direct Drive Blood Storage refrigerators

2. Performance

- Minimises thermal shock during usage compared to conventional refrigerators
- Operating temperature range: +10°C to +43°C
- Voltage and frequency: 2 x 235 Wp, 24V solar panels
- Guaranteed never to freeze contents with patented Sure Chill technology

3. Features

- Display Thermometer: Externally readable digital display thermometer
- Surge protector (optional)
- Front opening for easy stock management
- Corrosion resistant: Epoxy Polyester (EPO) coated Galvanized Steel Outer Cabinet.
- Fitted with two latch locks for use with a padlock
- Designed for easy maintenance and repair
- 2 year of warranty

4. Specifications

PARAMETERS	GBR 50DC	GBR 100DC
Refrigerator Dimensions (HxLxD)	1220 x 795 x 750mm	1820 x 795 x 750mm
Bin Dimensions (HxLxD)	338 x 446 x 107 mm	338 x 446 x 107 mm
Number of bins	2	3
Gross Storage Capacity	57.7 Ltr	121 Ltr
Energy Consumption, Stable Running	0.56 kWh/ 24 hours	0.75 kWh/ 24 hours
Blood Bag Storage (unseparated, 350 ml)	54	81
Energy Consumption, Cool Down Test	0.64 kWh/ 24 hours	1.90 kWh/ 24 hours
Refrigerant	R600a	R600a
Net Weight	96 Kg	125 Kg
Gross Weight	125 Kg	160 Kg
Quality Standard	ISO 9001:2008	ISO 9001:2008
Hold over time	5-7+days	8-12+days
Stuffing Quantity (20' Container)	21	21
Stuffing Quantity (40' Container)	42	42

Godrej Blood Bank Refrigerators with Sure Chill technology



Sure Chill technology is a result of more than 20 years of experience and is in use in over 30 countries across the globe.



Our refrigerators have been independently tested and WHO pre-qualified to ensure consistent performance and reliability.



Godrej Appliances has the widest service network in the country that ensures efficient and effective service delivery for all customers. Call Centres operate 24x7 in all four zones of the country and cater to 266 cities across India. Customer executives are equipped to handle customer calls in 10 different languages and resolve issues in the shortest time possible.