

Non-fluorocarbon refrigerators

Toshiba Corp., Japan, has launched a new range of non-fluorocarbon refrigerators. These units employ isobutane (R-600a) as the refrigerant and cyclopentane as the foaming agent for thermal insulation. Toshiba has also launched two large-capacity eco-friendly models, GR-NF47K and -NF42K, which are not only HFC-free but also use lower quantities of lead, PVC and other substances that affect the environment. Moreover, they have attained the trade's lowest power consumption of 280 kW/y by using isobutane with high cooling efficiency, optimizing the refrigeration cycle and adopting a new type high-efficiency compressor. Application of photo-plasma technology prevents deterioration of food. Utmost considerations are given to safety by adopting systems, such as "low temperature defrosting", which perform defrosting at temperatures lower than isobutane's ignition temperature, and control system for lowering the concentration of isobutane gas by quickly detecting leakage as and when it occurs. (Website: www.jarn.co.jp)