

DuPont™ ISCEON® REFRIGERANTS

CASE STUDY- ISCEON® MO29 (R422D)

Supermarket

Conversion of a REWE Group Supermarket - Germany

A large majority of the estimated, one million R-22-based systems in Germany are operated by food retailers. With the ban on recharging of refrigeration and air-conditioning systems with virgin HCFC refrigerants (predominantly R-22) rapidly approaching, there is a need for imminent action to avoid supply shortages, refrigeration unit outages, product losses and, in the worst case, administrative penalties. The REWE Group is one of the first German retail giants to react, and has converted its first refrigeration unit to non-ozone-depleting DuPont ISCEON®MO29 refrigerant (R422D) as part of a pilot project.

Within the 5,000 supermarkets across Germany belonging to the REWE Group, there are approximately 2,000 refrigeration units which are still running on R-22. This means that in order to meet the 2010 deadline, 13 supermarkets per week for the next three years need to be either converted or, as part of a store's refurbishment, newly-equipped. Because the retail giant does not want to run the risk of over-booked contractors and potential fines, it is proactively tackling the conversion issue far ahead of the deadline.

A Minimal Markt in Munster, northern Germany, which belongs to the REWE Group, was selected for the first pilot project. Decisive in the company's decision to take this initial step was consultation provided by Mathias Diebold, product manager at Linde Kältetechnik GmbH, which is currently responsible for the refrigeration systems at the store.



The R-22 unit at the store, which was built in 1989, cools over 40 metres of shelves and display cabinets for meat, milk and other dairy products, as well as three further cold rooms. The conversion to ISCEON® MO29, which took place in the middle of March, was carried out by Ralf Sievert, refrigeration unit

engineer at Linde, who was greatly impressed by its simplicity. “A routine procedure! Virtually no technical modifications to the unit were required.” And the principle advantage for the end-user was expressed by Harald Van Dillen, store manager in Munster: “Business was not disrupted by the conversion. This is of great advantage to retailers, as food remains undamaged and sales go on without interruption. This saves us both precious time and money.”



ISCEON[®] MO29 (R-422D) is one of the three DuPont replacements for R-22 which have been developed especially for use in medium- and low-temperature applications as well as in air conditioning. All three products offer the decisive benefit of compatibility with MO and AB lubricants in existing units, thus a change of oil type to more expensive POE oil is not required. This saves material costs, time and manpower. Energy consumption can also fall, as has been previously documented through numerous conversions in England and the USA. In applications such as those used in food retail, where refrigeration can be responsible for 40-60 percent of energy consumption, this can lead to significant cost savings.

These refrigerants are also in use in UK supermarkets where they are replacing the ozone depleting R22 and R408A

Please consult our website www.idsrefrigeration.co.uk for further product information and conversion guidelines.

The information contained in this document is given in good faith based on our current knowledge. We guarantee that our products comply with our sales specifications. This information must on no account be used as a substitute for necessary prior tests, which alone can ensure that a product is suitable for a given use.