

# DuPont™ ISCEON®

## REFRIGERANTS

### Product Information

## DuPont™ ISCEON® MO49Plus Conversion Guidelines – Automotive Air-Conditioning Systems

### IDENTIFY REFRIGERANT

Before conversion, know what refrigerant is currently in the system. Then, ensure that the system is in good working order and leak free. Pay special attention to the compressor shaft seal when performing all leak checks. Check typical evaporator and condensing pressures of the system.

### RECOVER REFRIGERANT

Recover the R-12 to a dedicated recovery cylinder. Do not vent the reclaimed refrigerant to the air and do not mix the reclaimed refrigerant with other refrigerants.

### REMOVE OIL AND FLUSH SYSTEM

Check the condition of the lubricant, e.g. water, acid, solids; and, if necessary, renew the contaminated oil with the same type of lubricant and dispose of the old oil responsibly; check local and federal guidelines regarding disposal. ISCEON® MO49Plus is compatible with new and traditional lubricants.

- If required for proper oil return to the compressor, a small amount of approved PAG, of similar viscosity to the MO in the system should be added.
- It is considered good practice to change the filter dryer whenever the system is exposed to atmospheric air.

- Removal of R-12 from the system can result in the loss of some oil. If the oil level can be checked, add the quantity lost. Recheck after a period of running. If the oil level cannot be checked, it is advisable to add 5 to 10% of the oil charge to the system.

### REPAIR NECESSARY PARTS/RESEAL

Check the condition of hoses and replace if necessary. It is not necessary to use any different materials when converting to ISCEON® MO49Plus.

### ADD NEW SERVICE PORT ADAPTERS

Install the new service fitting for ISCEON® MO49Plus, if required.

### APPLY NEW LABELS

Apply new ISCEON® MO49Plus labels under the hood. Clearly label the system as containing ISCEON® MO49Plus and type of lubricant.

### EVACUATE SYSTEM

Remove all air and moisture from the system before retrofitting with new refrigerant.



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## CHARGE SYSTEM WITH ISCEON<sup>®</sup> MO49 Plus

Charge the system with the new refrigerant – remove from the cylinder in the liquid phase. Do not charge liquid refrigerant directly into the compressor. The total charge of ISCEON<sup>®</sup> MO49 Plus will be approximately 10% less than R-12, based on density versus R-12.

Note: It is not unusual for an occasional bubble to be seen in the liquid line sight glass. A small number of bubbles in the sight glass is not a reliable indication of an under charged system.

- Run the system and check the operating conditions. The pressure of ISCEON<sup>®</sup> MO49 Plus is higher than with R-12. Note: the pressure-temperature relationship of ISCEON<sup>®</sup> MO49 Plus is different than that of R-12. Therefore, it is necessary to have the ISCEON MO49 Plus pressure table available.
- Check and adjust any pressure switches that might be in the system.

## LEAK CHECK SYSTEM

Carry out a thorough leak check paying special attention to the compressor shaft seal. Any electronic detection system suitable for detecting HFC refrigerants (e.g., R-134a) is suitable for detecting ISCEON<sup>®</sup> MO49 Plus.

- In the event of a leak from the system, it is possible to top-off the system after repair, with virgin product without detriment to performance.

## RECYCLE REFRIGERANT

It is possible to recycle ISCEON<sup>®</sup> MO49 Plus, but care must be taken to ensure the whole of the refrigerant charge is removed from the system. It is equally important to ensure that when recovered product is once again charged to a system the refrigerant is taken from the liquid phase.



prochimac SA  
rue du château 10 - CP 78  
CH-2004 NEUCHÂTEL 4  
Tél: +41 (0)32 727 36 00  
climalife.ch@climalife.dehon.com  
[www.climalife.dehon.com](http://www.climalife.dehon.com)

For Further Information: (800) 235-7882

[www.isceon.com](http://www.isceon.com)

DuPont Fluorochemicals  
Wilmington, DE 19880-0711

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