

GET COOL FASTER

Minus 30 ❄️

The Natural Solution for
Automotive and fixed air conditioning & refrigeration



HYC-3011
GREEN 3526197
R03/2020



Minus 30 is our high purity blend of R290 and R600a hydrocarbons, ideal for use in automotive, fixed air conditioning and refrigeration.

Advantages

- Operates at lower pressures to R134A
- Similar volumetric refrigerating effect to R12 and R134A
- Can be used in a R12 or R134A compressor or a specific hydrocarbon compressor
- Can be used with R12 or R134A heat exchangers and expansion devices
- Compatible with most common refrigeration materials and lubricants

Applications:

- Vehicle Air Conditioning
- Refrigerated Containers and Transports
- Domestic Refrigerators and Freezers
- Drink Dispensers
- Supermarket refrigeration cabinets & displays



Minus 30 is derived from a uniquely pure natural gas source, and manufactured to the strictest quality controls.

Minus 30 is efficient and safe to use, requiring no modification to air conditioning systems and minimal modification to most refrigeration systems.

Minus 30 ensures exceptional energy efficiency, dispersing heat much more effectively than fluorocarbon equivalents.

Substantial cost savings for long term operation are achievable by replacing fluorocarbon refrigerants with Minus 30.

Available in
4.5kg, 9kg cylinders,
300g cans and 450g cans



Also available 4.5kg & 9kg cylinders with UV dye added. This is an easy way to introduce dye to your system for the purpose of leak detection.

Additional Information

Product Composition

- High purity hydrocarbon refrigerant
- Precision Propane/Isobutane blend
- Cylinder has a liquid withdrawal valve (upright position labelled)
- 9 kg cylinder will charge up to 40 cars
- Packed in a cardboard box with
- Information kit containing refrigerant identification labels, material safety data sheet and other usage guidance information.

Product Characteristics

- Superior heat rejection – gives better condenser heat exchange performance
- 30% by weight required of recommended fluorocarbon refrigerant charge or refer to charge weight guide.
- Digital scales recommended – they save a great deal of time and also help to prevent refrigerant wastage.
- Minus 30 is compatible with any refrigerant lubricant, however we strongly recommend a system flush and use of SRO500 oil in all systems

Effect on Systems

- Lower head pressures reduce load on compressor
- Less heat at compressor
- Less engine drain at idle and when running
- Positive liquid head at TX valve or restrictor
- Quicker pull down temperature at vent
- Lower vent temperature at all times
- No upgrading to existing processing equipment required.
- No change to repairers procedures while installing



The benefits of HyChill hydrocarbon refrigerants.



HyChill's hydrocarbons deliver a huge array of benefits to the environment and to the consumer. Created by nature, not by a chemical company, hydrocarbons cannot be patented, keeping them affordable and available to everyone. They have an atmospheric life of less than one year with no effect on the ozone layer and virtually no contribution to global warming. Many important qualities found in HyChill products make them an extremely efficient and reliable choice for most air conditioning and refrigeration systems.

USE LESS GAS

HyChill hydrocarbon refrigerants have a unique advantage. Each kilogram of hydrocarbon refrigerant replaces 3 kilograms of fluorocarbon refrigerant, so you only require a third of the refrigerant by weight.

LESS ENERGY USE

Hydrocarbon refrigerants in refrigeration or car air-conditioning systems use less energy than fluorocarbon refrigerants.

This provides a number of benefits:

- Operating costs are lower.
- Compressor loads are reduced, which reduces wear and tear, extending component life and reducing leakage.
- Less energy consumed means less fossil fuel burned, resulting in lower global warming.

COSTS LESS

With or without dye, Minus 30 costs less than \$10 per car, significantly less than the cost of R134a.

USE EXISTING EQUIPMENT

The equipment currently used for existing refrigerants requires no modification or change for charging hydrocarbon refrigerants. Since no retrofitting is required, HyChill refrigerants are the perfect "drop in" solution for systems, which previously used gases such as CFC R12, HFC R134a.

NO ARC LICENCE

An ARC license is not required when using HyChill refrigerants. You still require a handling license to recover or handle CFC, HCFC and HFC gases.

ENVIRONMENTAL

The principal components of HyChill refrigerants are naturally occurring gases - taken from uniquely pure sources and further purified and precision blended. Their ozone depleting (ODP) substance rating is zero and they have minimal global warming potential (GWP). Independently verified by Good Environmental Choice Australia to GECA Standard 26/2007 - Refrigerants.

Safe, natural, and environmentally benign, the HyChill range of natural organic refrigerants is suitable for a wide range of air conditioning and refrigeration applications.



HYC-2011
GECA 26-2007
Refrigerants



IMPORTANT NOTICE:

From 1 July 2005, the Australian Government has introduced a national licensing and authorisation system for businesses and technicians that use ozone depleting or synthetic greenhouse gas refrigerants.

The system establishes national standards for the use, storage and disposal of these refrigerants and replaces existing state and territory requirements. The national system applies only to ozone depleting and synthetic greenhouse gas refrigerants.

Under the Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995, all businesses that buy, sell, store or dispose of ozone depleting or synthetic greenhouse gas refrigerants, and technicians that handle these refrigerants where there is a risk of emissions, are required to hold an authorisation (businesses) or license (technicians).

The national system does not apply to users of 'natural refrigerants' such as air, hydrocarbons, water, CO2 and ammonia.

However businesses and technicians using these refrigerants should be aware that:

- A national refrigeration and air conditioning license is required if their work involves any form of handling of ozone depleting and synthetic greenhouse gas refrigerants, where there is a risk of emissions, including decanting or evacuating systems
- State and territory laws may apply to the use of 'natural refrigerants'.

CUSTOMER SATISFACTION

When you service your customers' air conditioner with Minus 30 hydrocarbon refrigerant from HyChill, you are enhancing the most important component of your business: 'Customer Satisfaction'.

Minus 30 refrigerant is a highly efficient heat transfer medium; it uses up to 30% less energy to produce a faster result. On really hot days, Minus 30 will put a smile on your customers' face. Content customers guarantee the growth of your business.

Because you only require 1/3 of R134a's charge weight, or approximately 85% by volume, it's easy to see that Minus 30 is the cost alternative to HFC refrigerants

Each standard 22 litre cylinder will hold 9kgs of Minus 30 as opposed to 20kgs for R134a, this means you are only paying for 9kgs of refrigerant and not 20kgs. Furthermore, each 9kgs of Minus 30 will charge 30 or more systems whereas 20kgs of R134a will only charge about 25 systems.

You can use your normal equipment; Minus 30 is suitable for all systems. It doesn't matter whether it is an old R12 system, or a new R134a system, Minus 30 is compatible with all oils, O rings, seals and gaskets. Some reduced barrier hoses may leak and should be replaced.

We recommend the use of modern service equipment, scales and diagnostic tools, because they save time and money. We also recommend HyChill SRO 500 Synthetic Refrigerant oil, in systems and in your vacuum pump. It is non hygroscopic and is compatible with all refrigerants.

Old systems need to be serviced with a complete understanding that a "gas-up" will not fix faults! Your diagnostic skills are essential. If you have a system which won't work, call us. If we don't know the answer we will research it for you. If you are unfamiliar with hydrocarbon refrigerants, you should contact us for advice.

A free information manual is available. There is a downloadable version on our website. If you need printed copies, just phone us and we will mail one to you.



LESS
ENERGY
FASTER
RESULT

OIL & FLUSH

SRO-500

SRO 500 Synthetic Refrigerant Oil (SRO) is a fully synthetic industrial lubricant developed specifically for auto air conditioning compressors. It is compatible with all commonly used refrigerants, and does not absorb moisture. Ideal replacement for Polyolester (POE) and Polyalkyleneglycol (PAG) lubricant, and superior to both.



ECO-FLUSH

ECO-Flush is a liquid flushing agent, which dissolves gummy oil oxidation products and loosens insoluble materials in refrigeration and air-conditioning systems and compressors. It is non-corrosive and acts as an effective corrosion inhibitor to protect bare metal surfaces. Its low viscosity and solvency increases the effectiveness of the flushing procedure.



A special blend of Minus 30 is available for 'Extreme Conditions' (EC) where ambient temperatures can reach between 50°C and 60°C.

Minus 30 EC has a much higher critical temperature and lower operating pressure and will continue to operate under 'Extreme Conditions' that would see traditional R134a systems fail to operate.

**EXTREME
EC
CONDITIONS**



HyChill provides stickers for labelling systems charged with HC. Contact us if you need extra.

Safety and Handling

Hydrocarbon refrigerants are flammable and classed 2.1 DG. Extreme care must be taken when they are being handled. Always observe the following safety precautions.

- Remove and keep away from ignition sources.
- Always wear eye protection.
- Wear gloves and do not allow liquid refrigerant to contact the bare skin, as this can cause frost bite.
- Do not heat containers of refrigerant.
- Provide adequate ventilation when charging or recovering refrigerant as they are heavier than air.
- Store refrigerants in well ventilated areas.
- Use caution when steam cleaning around A/C components as hot water on the pipes and tubing could cause damage due to thermal expansion of the refrigerant contained within them.
- Avoid breathing refrigerant vapour.
- If pumping refrigerant into a cylinder, do not allow the cylinder to be filled to more than 80% of its capacity, as the remaining 20% is necessary to allow for any thermal expansion of the refrigerant.
- Always recover all fluorocarbon refrigerants.
- Refer to the MSDS.
- Check for reduced barrier hose and replace with full barrier if required.
- Clearly label systems charged with HC.
- Refer to AS/NZS1677.2 for guidance.



Minus 10

Minus 10 is our high purity and consistency R600a (isobutane) refrigerant - the dominant refrigerant for domestic and light commercial refrigeration.

Application and use

Primarily for use in purpose built systems designed to run R600a such as domestic fridges. Domestic fridges now typically come with R600a for performance and environmental reasons. Also used in wine coolers, bar fridges and increasingly in light commercial systems such as drink display cabinets. It is not a drop in replacement for R12 or R134a.

Minus 40

Minus 40 is a high-purity R290, propane, single ingredient refrigerant used in medium to low temperature refrigeration systems. Ideal for domestic and commercial air conditioning and transport refrigerant.

Application and use

Mainly used in purpose built R290 systems such as ice cream and food display cabinets. Ideal for use in commercial and industrial refrigeration and air-conditioning systems where synthetic refrigerants have traditionally been used. It is expected that more R290 split system air conditioners will be appearing in the market place.

Minus 50

Minus 50 is a highly efficient blend of R290 propane and R170 ethane that can be a suitable replacement for less efficient and environmentally harmful synthetic gases such as R22, R502, R407c and R404a.

Application and use

For use in commercial and industrial refrigeration and air-conditioning systems where R22 has traditionally been used. When switching from traditional fluorocarbon refrigerants power bills can be dramatically reduced, and the wear and tear on the air conditioning system can also be minimised.

AFTER-SALES SUPPORT

What makes HyChill unique, apart from its range of products, is the standard of after-care support and that famous HyChill service. It's all about customer satisfaction!

Friendly staff and experienced representatives are on hand for advice and always ready to assist. Comprehensive information is readily available for both the trade and consumers.

You can rely on HyChill to set new industry standards in total customer satisfaction.

HyChill Australia

85a Canterbury Road, Kilsyth,
Victoria, Australia 3137

1300 492 445

Phone: **+61 3 97285055**

Fax: **+61 3 97618799**

info@hychill.com.au

hychill.com.au

