



NETTOGAZ GC1



Non contractual picture

PRESENTATION

NETTOGAZ GC1 is a mixture which has no effect on the ozone layer and is designed for the internal cleaning of small volume refrigeration and air conditioning refrigerant circuits (*for industrial use: see Facilisolv[®]*)

Developed by the Climalife Dehon Group, it provides the solution to eliminating water or solid debris-type impurities within canalizations and acts as a very good solvent, particularly efficient for all common refrigeration lubricants.

The **GC1's** properties are similar to those of the R-141b, enabling the product to be similarly, simply and efficiently implemented.

PHYSICO-CHEMICAL PROPERTIES

Appearance	colourless liquid
Absolute initial boiling point under 1.013 bar.....	+ 20 °C
Density of liquid at +20 °C	1.33 kg/dm ³
Absolute vapour pressure at +20 °C	0.52 bar
Kauri Butanol value	> 60
ODP	None
Flash point	None

USE

The correct operation of a refrigeration installation is connected to the perfect cleanliness of the circuit internally.

The impurities present within the circuit can cause the incorrect functioning of the installation, whether these impurities are water, welding debris, calamine or oxide-type solid impurities.

There are multiple possible causes of impurities within these circuits. The following are just some of the more common causes:

- electrical engine "burn-out" within airtight units or accessible airtight unit.
- the presence of humidity within the circuits.
- lubricant deterioration.
- acid formation.
- oxide formation on soldering and welding points if not performed under inert gas.

Cleaning requirements:

- Cleaning is occasionally required before activating a new installation,
- Cleaning must be performed after pollution or a break which has contaminated the circuit of an installation in use.

GC1 COMPATIBILITY WITH MATERIALS AND ELASTOMERS

GC1 has no effect on most metals and alloys currently used in industry.

Metals	Plastics	Elastomers
Steel	Epoxy resins	Butyl rubber*
Copper	Polyethylene	Natural rubber*
Aluminium	Polyester	Polysulphide
Iron	PTFE	EPDM nylon
Stainless steel		Chlorosulphonate polyethylene
Bronze		Buna-S*
Zinc		

*slight swelling

Compatibility tested after exposure at boiling temperature for one hour.
 Butyl rubber is preferred for prolonged exposure > 1 month.
 Exception: swelling in the cases of PTFE and siliconised rubber.

NETTOGAZ GC1 IMPLEMENTATION

NETTOGAZ GC1 pressurised with anhydrous nitrogen is packaged using steel packaging and is provided with 30-litre recovery drums so as to recover and store the polluted product after use.

A set of reusable accessories for GC1 recovery is provided by obligation with the 1st order. It is made up of:

- 2 special stoppers: one with a Ø of 3/4" and one with a Ø of 2" with a plunger tube to control the filling of the recovery drum,
- a crown measuring 25 m made out of flexible PVC hose, Ø 10X14 to be cut to the desired length for junctions,
- two tightening bands for the flexible PVC hose, Ø 10 X14.

This first, inseparable set can be ordered separately at a later date.

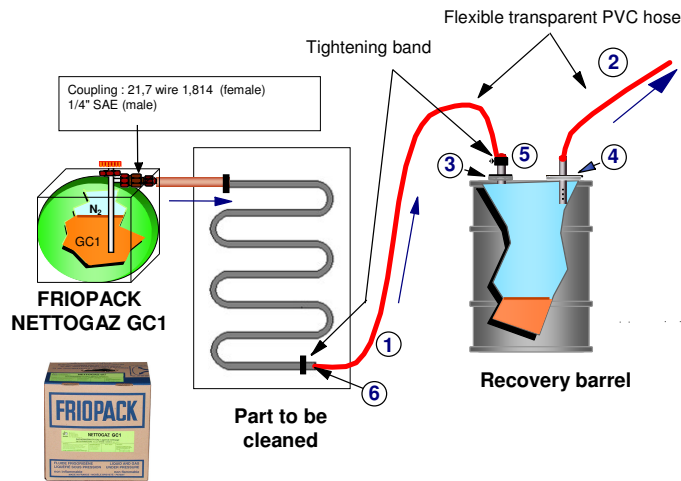
In the event of water in the circuit, the latter must be removed via a nitrogen purge prior to cleaning with NETTOGAZ GC1.

Industrial application: please contact us.

CLEANING PROCEDURE FOR AN INSTALLATION

Before cleaning, check the correct assembly and fitting of the different stoppers and bands.

APPLICATION OF NETTOGAZ GC1



- Attach the element being cleaned to the liquid outlet of the **NETTOGAZ GC1** cylinder.
- Attach the outlet of the element being cleaned to the special stopper^③ of the recovery drum with a suitable length of flexible PVC hose^①. Tighten the two ends of the PVC hose with the tightening bands ^⑤ and ^⑥.
- Connect a length of flexible PVC hose^② to the special stopper Ø 2" ^④ so as to remove any possible **NETTOGAZ GC1** vapours to the outside of the premises and into the outside air.
- Circulate the **NETTOGAZ GC1** and activate the circulation by quickly opening and closing the cylinder tap so as to apply the "water-hammer" effect to the fluid.
- The transparent PVC hose^① enables you to view the **NETTOGAZ GC1** circulating within the system.
- Stop the circulation when the **GC1** product exits the circuit translucent.
- Purge the system using anhydrous nitrogen without exceeding 10 bars to recover the liquid **GC1** present in the circuit.
- At the end of the liquid draining operation, limit the nitrogen pressure so as not to deform the recovery drum and so as to empty the circuit and to ensure having removed all of the **NETTOGAZ GC1** product.

THE RECOVERY DRUM MUST NEVER BE COMPLETELY FILLED.

The level of liquid must not exceed the end of the plunger tube of the special stopper, Ø 2" ^④.

GC1 RECOVERY IS OBLIGATORY

The recovery drums must be identified with the appropriate labelling and **returned to the Climalife Dehon group**. Contact your local Climalife subsidiary or dealer.

QUANTITY OF GC1 TO BE IMPLEMENTED

Please find below the approximate quantities of **GC1** contained at 20°C in 1 linear metre of:

- 1/4' tubeapproximately 20 g
- 3/8' tubeapproximately 60 g
- 1/2' tubeapproximately 120 g
- 5/8' tubeapproximately 200 g
- 3/4' tubeapproximately 300 g
- 7/8' tubeapproximately 420 g
- 1 1/8' tube..... approximately 710 g
- 1 3/8' tube..... approximately 1,070 g

PRECAUTIONS FOR USE

NETTOGAZ GC1 is non-flammable.

Never clean the inside of a compressor with **NETTOGAZ GC1**.

The control components must always be cleaned separately and apart from the circulation of **GC1** within the circuit.

Each element of the refrigeration circuit should be cleaned separately.

Never pressurise **NETTOGAZ GC1** with compressed air or oxygen.

GC1 vapours are heavier than air.

Workplaces must be ventilated and evacuations provided for in low lying parts of the premises. This fluid must not be used in premises below ground level without taking the necessary provisions.

NETTOGAZ GC1 pressurised with nitrogen is regulated with the same conditions as for refrigerants - Class 2 - Danger Code 20.

Name: nitrogen gas + 1,1,1,3,3-pentafluoropropane mixture.

The information contained in this product datasheet is the end product of our studies and experience. It is provided in good faith, but should not under any circumstances be taken to constitute a guarantee on our part and for which the company cannot be held liable. This is particularly the case where the rights of third parties are concerned, or in situations where a user of one of our products fails to observe the relevant regulations.

Copyright© 2009 - dehon service PLC - All rights reserved.

Direction and departments: 26, avenue du Petit Parc - 94683 Vincennes Cedex, France
Tel.: +33 (0)1 43 98 75 00 – Fax: +33 (0)1 43 98 21 51
E-mail: contact@climalife.dehon.com

Office headquarters: 4, rue de la Croix-Faubin - 75011 Paris, France
www.climalife.dehon.com

Public limited company with a board of directors and a share capital of € 5,100,000 - Registered with the Register of Commerce of Paris under number 310 259 205.