
DURACOOOL® PRODUCTS

MOBILE A/C APPLICATIONS

EDUCATIONAL INFORMATION & FREQUENTLY ASKED QUESTIONS
(FAQ's)

DURACOOOL® Refrigerants are the leading hydrocarbon refrigerant on the market today and that's because it provides consistently superior cooling capabilities and boasts all the qualities of a product that is not only safe and highly efficient but it is also NON OZONE-DEPLETING and NON GLOBAL-WARMING. Here are the facts:

◆ **NON CORROSIVE – WON'T HARM AIR CONDITIONING COMPONENTS:**

- ✓ Guaranteed in writing!
- ✓ Over 5 million plus vehicles converted in the last 5 years with ZERO incident of damage to air conditioning systems
- ✓ System head pressures greatly reduced from R134a systems - similar to R12 systems

◆ **MUCH COOLER & MORE EFFICIENT! VERY SIMPLE INSTALL!**

- ✓ Cools extremely better than R134a - Cools marginally better than FREON
- ✓ 10% less fuel consumption - Up to 35% more efficient than R134a - Moderately more efficient than FREON

◆ **VERY SIMPLE INSTALL!**

- ✓ Simple economical conversions of high/low screw on fittings - NO RETROFIT REQUIRED!
- ✓ Compatible with mineral & synthetic oils including PAG & Ester - NO OIL CHANGE REQUIRED!
- ✓ No special equipment required for installation. Use your R12 or R134a equipment and tools
- ✓ Requires only 40% of charge by weight of R134a and 35% of FREON R12

◆ **BETTER PERFORMANCE AND SAFETY!**

- ✓ Patented hydrocarbon friction fighter enhances performances and safety
- ✓ Auto ignition of 1635°F is ACTUALLY a higher auto ignition than R134a which is 1328°F
- ✓ Not one claim to our insurer for fire or safety EVER!
- ✓ Absolutely non-toxic – 100% natural organic product

PRODUCT PACKAGING SIZES

The DURACOOOL® hydrocarbon refrigerants are available in three packaging sizes.

- 6 oz. cans (packaged 12 per case)
- #30 cylinder (equivalent to 30lbs 134a /34.4lbs R12)
- #50 cylinder (equivalent to 50lbs 134a/57lbs R12)

PRODUCT PACKAGING SIZES (not applicable in the United States)

DURACOOOL® participates in a Federally & Provincially mandated core return program which helps to prevent the refrigerant packages (cylinders and 6 oz. cans) from ending up in our land fill sites.

The can deposits and the cylinder core deposits are fully refundable. Core deposits are as follows:

- 6 oz. cans \$ 12.00 (\$1/can)
- #30 cylinder \$ 50.00 / cylinder
- #50 cylinder \$ 60.00 / cylinder

Cylinders come equipped with liquid/vapor “Y” valves and liquid extraction tubes. Cylinders are certified for 5 years from date of manufacture and are completely reusable and can be used to recycle or reclaim any and all refrigerants.

Empty cylinders must be in original box for deposit or credit. No deposit or credit allowed if cylinder or valves are damaged. Cylinders must be completely empty or no deposit or credit allowed. Cans 6 oz. may be returned in any suitable sealed carton or container packed 12 per package.

EQUIVALANCIES TO R12 AND R134a

DURACOO[®] LIMITED					
REFRIGERANTS					
"A natural solution to a global dilemma"					
REFRIGERANT QUANTITY EQUIVALENT BY WEIGHT					
DURACOO 12a[®]			HFC 134a		CFC 12
1 oz			2.5 oz		2.8 oz
2 oz			5.0 oz		5.7 oz
3 oz		= 1/2 can	7.5 oz		8.5 oz
4 oz			10 oz		11.4 oz
5 oz			12.5 oz		14.2 oz
6 oz		= 1 can	15 oz		17 oz
7 oz			1 lb.	1 oz	1lb.
8 oz				4 oz	6 oz
9 oz		= 1 1/2 cans		6 oz	9 oz
10 oz				9 oz	12 oz
11 oz				11 oz	15 oz
12 oz		= 2 cans		14 oz	2 lb.
13 oz			2 lb.		5 oz
14 oz				3 oz	8 oz
15 oz		= 2 1/2 cans		5 oz	10 oz
1 lb.	(16 oz)			8 oz	13 oz
	1 oz			10 oz	3 lb.
	2 oz	= 3 cans		13 oz	3 oz
	3 oz			15 oz	6 oz
	4 oz		3 lb.	2 oz	9 oz
	5 oz	= 3 1/2 cans		3 oz	12 oz
	6 oz			7 oz	14 oz
	7 oz			9 oz	4 lb.
	8 oz	= 4 cans		12 oz	4 oz
	9 oz			14 oz	7 oz
	10 oz		4 lb.	1 oz	10 oz
	11 oz	= 4 1/2 cans		3 oz	13 oz
	12 oz			6 oz	5 lb.
	13 oz			8 oz	2 oz
	14 oz	= 5 cans		11 oz	5 oz
	15 oz			13 oz	8 oz
2 lb.			5 lb.		11 oz
	1 oz	= 5 1/2 cans		2 oz	14 oz
	2 oz			5 oz	6 lb.
	3 oz			7 oz	4 oz
	4 oz	= 6 cans		10 oz	6 oz
	5 oz			12 oz	9 oz
	6 oz			14 oz	12 oz
	7 oz		6 lb.	1 oz	15 oz
	8 oz			4 oz	7 lb.
	9 oz			6 oz	5 oz
	10 oz	= 7 cans		9 oz	8 oz
	11 oz			11 oz	10 oz
	12 oz			14 oz	13 oz
	13 oz	= 7 1/2 cans	7 lb.		8 lb.
	14 oz			3 oz	3 oz
	15 oz			5 oz	6 oz
3 lb.		= 8 cans		8 oz	9 oz

PRESSURE CHART

DURACOOL® Refrigerants Temperature-Pressure Chart Chartre Pression-Température des Réfrigérants Black Figures-Pressure,psig / Bold/italic Figures-Vacuum Noir = Pression en Lbs/Pc Manométrique (Psig) / Bold/l'italique figure le vide					
		R-134a	R-12	DURACOOL 12a®	
°F	°C			Bubble	Dew
-40	-40.0	-7.20	-5.40	-4.00	-7.50
-35	-37.2	-6.00	-4.10	-2.60	-6.50
-30	-34.4	-4.80	-2.70	-1.00	-5.40
-25	-31.6	-3.30	-1.10	0.60	-4.10
-20	-28.8	-1.80	0.60	2.50	-2.70
-15	-26.0	0.00	2.40	4.40	-1.20
-10	-23.2	2.00	4.50	6.60	0.50
-5	-20.6	4.10	6.70	8.80	2.20
0	-17.8	6.50	9.10	11.30	4.20
5	-15.0	9.10	11.80	14.10	6.40
10	-12.2	12.00	14.60	17.00	8.70
15	-9.4	15.10	17.70	20.20	11.30
20	-6.7	18.40	21.00	23.50	14.00
25	-3.9	22.10	24.60	27.10	17.00
30	-1.1	26.10	28.40	31.00	20.20
35	1.7	30.40	32.60	35.20	23.70
40	4.4	35.00	37.00	39.50	27.30
45	7.2	40.10	41.70	44.30	31.40
50	10.0	45.40	46.70	49.30	35.60
55	12.8	51.20	52.00	54.70	40.20
60	15.6	57.40	57.70	60.40	45.10
65	18.3	64.00	63.70	66.20	50.20
70	21.1	71.10	70.20	72.60	55.70
75	23.9	78.60	77.00	79.30	61.70
80	26.7	86.70	84.10	86.40	67.90
85	29.4	95.20	91.70	93.70	74.30
90	32.2	104.00	99.70	101.60	81.40
95	35.0	114.00	108.00	109.90	88.80
100	37.8	124.00	117.00	118.60	96.70
105	40.5	135.00	127.00	127.50	104.80
110	43.3	146.00	136.00	137.00	113.50
115	46.1	159.00	147.00	147.20	122.80
120	48.9	171.00	158.00	157.70	132.50
125	51.6	185.00	170.00	168.40	142.40
130	54.4	199.00	181.00	179.90	153.10

CHARGING INSTRUCTIONS

A Step by Step Guide for Charging Refrigeration and Air Conditioning Systems with DURACOOOL 12a® Refrigerant

A: PARTS REQUIRED

- Average 12 -15 oz. of DURACOOOL® refrigerant per automotive AC system

Read all instructions on the DURACOOOL® can. DURACOOOL 12a® will safely install in either R12 or R134a systems with the conversion kits as indicated above.

B: PREPARING KIT FOR USE

Components of the kit should be hand tightened to prevent damage to the “O” rings. Tighten until you feel components meet then turn an additional half turn. If fittings leak when charging you must hand tighten further until sealed. Do not use a wrench to tighten.

- 1) With the can taper, turn can tap valve handle in counter clockwise direction until it stops in order to withdraw piercing needle to prevent premature puncture of can.
- 2) Screw can tap valve on threaded access on top of DURACOOOL® can.
- 3) Install hose onto male thread of can tap valve and screw brass adapter and blue connect valve to other hose end.

C: CHARGING PROCEDURE

R12 systems will require a low side conversion fitting which can be purchased separately (DC0095).

- 1) Locate low side service port of the AC system. Generally it will have a blue or a black cap (never connect to the high side of the AC system).
- 2) Remove low side dust cap. Connect hose fitting by pushing on to the male service port, ensure that the coupler fits snugly into place.
- 3) Turn AC to maximum and start engine (do not service in closed garage while engine is running).
- 4) Turn valve handle in clockwise direction, this will puncture the can.
- 5) Ensure that the DURACOOOL® can is inverted during the entire charging process (turned upside down).
- 6) Turn valve handle back in counter clockwise direction to permit refrigerant to flow through the hose and into the system via the low side.
- 7) When compressor cycles on and off about every 45 to 60 seconds turn valve in clockwise direction to stop the flow of refrigerant. Check vent for cooling. If cooling is inadequate or compressor is cycling excessively add small amounts of DURACOOOL® by opening and closing valve. Low side pressures should read between 30 and 38 psi.
- 8) Do not overfill. Exercise patience and let the system operate for several minutes before adding refrigerant.
- 9) When charging procedure is completed, close valve by turning valve handle in clockwise position until reaching a hard stop.
- 10) Remove quick connect fitting by pulling sleeve towards you, coupler will pop off.
- 11) Keep can tap valve attached to can if refrigerant is remaining in can. Do not store near an open flame. Store in a well-ventilated area.
- 12) Apply refrigerant identification tag on dry area near installation port. Dealer supplies tags with purchase of refrigerant.
- 13) Components of the kit should be hand tightened to prevent damage to the “O” rings. Tighten until you feel components meet then turn an additional half turn. If fittings leak when charging you must hand tighten further until sealed.
- 14) **DO NOT OVERCHARGE!** Exceeding 60 psi on low side may damage compressor. In some cases, clearing the site glass overcharges the unit. Any overcharging may cause loss of cooling efficiency.

FAQ's USAGE & INSTALLATION

Is DURACOOOL® a “drop in replacement”?

It is important to understand that there are two types of automobile air conditioning units, those charged with R12 and those charged with R134a (R134a is all automobiles manufactured after 1994, some during 1993). DURACOOOL® is a drop in replacement for R134 automobiles, but requires a high and a low fitting to convert R12 systems. This is a very inexpensive conversion (generally under \$20).

Does the system need to be completely empty?

Although mixing DURACOOOL® with R12 or 134a in your AC system would not damage or harm your system, it is illegal to charge your AC system without first evacuating the refrigerant that is currently in the AC unit.

Are the pressure and volume charts absolutely correct?

No, just like any other refrigerant, the pressure and volume charts should be used as a GUIDE.

We have found that you can have three of the same cars, same age, and they will all take different amounts of refrigerant, not significant differences, but different in volume still. The key is to use the chart as a guide rather than the rule. Often systems have component changes such as longer or shorter hoses – these types of changes may affect the volume, which will affect the stated or recommended charge.

I'm charging a car and it's not going into the system, what's wrong?

It could be one of a number of issues:

- 1) The compressor may be seized or damaged, in this case the refrigerant will not be pulled through the system. Check the fuse to make sure that there is power actually getting to the compressor.
- 2) It could be that there is a problem with the hose system, to check this, install the can taper to the hose and do not attached the hose to the automobile low fitting. Test it by releasing refrigerants through the hose (pointing the hose away from you or others). If the refrigerant sprays through the hose, this means that the can taper and the hose components are working effectively.
- 3) Next, install the quick release to hose end and then put a low side fitting (0095) into the quick release fitting, open your can tap and the refrigerant should flow through the fitting. If this happens then the kit is not blocked in any way.

If the compressor is working well and the kit seems to be working well but the refrigerant is not flowing into the system, you can contact our technical assistance, which can be found in 4.1 of this document.

Why can't I fit the low side fitting on to my low side?

The low fittings are internationally generic on every R134a system. This would mean everything from 1993/94 onwards. The high side fittings have changed slightly during specific model years but generally the DC401 or 403 kits should accommodate most models and years.

If you find that the fitting appears to be too large to fit the hose attachment, this means that you are trying to fit the hose onto the “high fitting”.

The low fitting is usually on the line from the accumulator or on the accumulator itself. The accumulator generally sits (on most cars) to the left of the engine rear (when facing the automobile as the installer). A line will run from the compressor to the accumulator, through the accumulator and run down towards the firewall. The low side fitting will be somewhere between the compressor and the firewall (generally); however, there are some cars that have their low side fitting under the car before the hose runs back into the compressor (such as some '92 Pontiac Grand Prix's which is right underneath the car). If the low side cannot be located, our technical assistance line may be able to locate it in the Mitchell Automotive Air Conditioning and Heating manual(s) – if the low fitting has been indicated on the engine diagrams. If not available, the only alternative is to contact a dealership service bay and request further information.

How come the air is too cold/too warm?

Too warm:

- Compressor may not be working or the system may have a leak and has lost the entire refrigerant charge.
- The automobile may have been overcharged with too much refrigerant. Check the pressures to know whether or not the system has been overcharged. A DURACOOOL® pencil gauge can be used to check the low side fitting PSI. Low side pressure should ideally be in the 30-39 psi range.

Too cold:

- The system may need another ounce or two of DURACOOOL® refrigerant. A system running too cold can indicate that it has been undercharged. Check the pressures to know whether or not the system has been undercharged. A DURACOOOL® pencil gauge can be used to check the low side fitting PSI. The pressure will indicate in the 20 psi to 28 psi range.

When you reclaim DURACOOOL® do you have to use separate containers from the other refrigerants if you are not reusing and if you are reusing?

Whether you are reusing the refrigerant or arranging for disposal, you should always use separate reclaiming bottles for different refrigerants, for the following reasons; reused refrigerants cannot be blended by law and secondly, disposal of the individual refrigerants require different disposal procedures.

Can you use the same tank for different refrigerants? Is there residual refrigerants left in the cylinders?

Yes you can use the same cylinders and there will be some residual refrigerant left in the cylinder, but not enough to affect performance.

When you recycle, does the oil separate friction-fighting additive?

The oil will not separate when the refrigerant is being recycled and will not separate when a system has leaked.

What setting should the evacuator be on when evacuating a system?

Vacuum settings should be set between 7-15 inches on the low side ideally. If a major evacuation has happened and a major component has been changed such as a compressor or evaporator then a hard vacuum should be pulled to 29 inches.

Does high head pressure get dangerous as it goes up? What is the maximum head pressure?

High head pressures can damage the compressor and other components, this is one of the attributes of DURACOOOL® in that it allows AC systems to operate effectively at lowered head pressures. Because damage can occur if head pressures are very high, it is important to be cognizant of this and measure the PSI accordingly. On the high side, head pressures should not exceed 260.

Will this product harm my evacuator?

Absolutely not, it is not corrosive and therefore cannot harm your evacuator. DURACOOOL® is one of the friendliest products produced today. It will actually enhance performance and provide natural lubrication.

FAQ's ENVIRONMENTAL

Is DURACOOOL® Environmentally friendly?

Yes. The DURACOOOL® line of products is NON-OZONE DEPLETING and NON-GLOBAL WARMING. Only hydrocarbon refrigerants can claim to achieve both of these criteria. GREENPEACE have been long singing the praises of the hydrocarbon technology, and encouraging governments and industry to adopt it over the current products.

Is Global Warming really an issue?

The Government first found that use of R12 greatly contributes to the depletion of our ozone and has accordingly outlawed the use of the R12 through a phased-out plan that was greatly accelerated. Now the Government has found that 134a greatly contributes to the high global warming potential (GWP). The GWP issue has been the focus of the Kyoto Protocol Branch of the United Nations Industrial Development Organization and the issues of temperature changes throughout the world are receiving a great deal of focus. In fact, there has been an agreement with the countries in the United Nations to go forth with a ban on 134a, through a gradual phase-out (following in the footsteps of R12). We anticipate that the phase-out will be accelerated just as the R12 phase-out was as investigation and forecasting of global warming is completed and published.

Does Environment Canada endorse this product?

Environment Canada does not endorse or approve any refrigerant. They do, however, regulate refrigerants that are found to be harmful to the environment (products such as R12 and R134a, both of which are regulated by Environment Canada). Because DURACOOOL® is not harmful to the environment, this product is not regulated.

FAQ's TOXICITY & CORROSIVENESS

Will DURACOOOL® harm my Air Conditioning and/or it's components?

DURACOOOL® will not harm your AC system or it's components. In fact, it will actually add life to air conditioning and refrigeration equipment. This is because it is non-corrosive as opposed to R134a and the R22 products that are highly corrosive.

Is DURACOOOL® toxic?

No. DURACOOOL 12a® is non-toxic, and totally organic. This is one of the major differences between the DURACOOOL 12a® product and the R134a product that is highly toxic.

FAQ's EFFICIENCY & EFFECTIVENESS

IS DURACOOOL 12a® efficient?

Yes. It has been found to operate even more efficiently than FREON R12, and significantly better than 134a. We have recorded energy savings up to 35%. There are also efficiency increases over the long term because the DURACOOOL 12a® offers longevity to the air conditioning systems and components. This equates to long term savings on repairs and maintenance of refrigeration and air conditioning equipment.

Do you have clear supporting evidence of higher efficiency, better fuel consumption, etc?

DURACOOOL® labs have converted and documented the energy effectiveness and the superior cooling capabilities. These studies are available through our customer service department of Deepfreeze Refrigerants, the contact information can be found in section 4.1 of this document.

FAQ's FLAMMABILITY

Is DURACOOOL® flammable?

Like all hydrocarbons, DURACOOOL® is flammable, and must be handled accordingly. Practically all lubricants, additives and oils used in the engine of a car are flammable. Gasoline is flammable. Hair spray, deodorant and whipped cream aerosol propellants are flammable. All must be transported, handled and utilized (or installed) using safe practices and following instructions where possible. We are happy to say that since the development of the DURACOOOL® business, there have been no incidence of concern with respect to combustion or flammability; in fact, there have been no claims at all, flammability or otherwise, with our insurance company.

MISCELLANEOUS

Does DURACOOOL® manufacture any other hydrocarbons under private label?

No, however, there have been businesses in the US, Canada or via the Internet, which have claimed that their product is DURACOOOL® "private labeled" and this is absolutely untrue. These businesses are attempting to pass off a poor quality product using the DURACOOOL® name for its reputation and acknowledged level of integrity.

I've been informed that if I put DURACOOOL® in my AC system, that it will void the compressor warranty.

Many compressor manufacturers claim that they will void a warranty if there is any product other than R12 or R134a installed in the system. We can only speculate as to why this statement has been made, with all the benefits over the 134a product. This statement is biased and demonstrates a strong allegiance between the OEMs and the compressor manufacturers – such is business these days. These statements are made despite the fact that the DURACOOOL® product is less corrosive and has been repeatedly tested and proven to NOT harm any portion of the air conditioning system.

DURACOOOL® PRODUCTS

MOBILE A/C - FREQUENTLY ASKED QUESTIONS

Although the compressor companies have made this statement it is virtually untrue. We have not, in the history of manufacturing DURACOOOL® seen any compressor warranties declined. Additionally, compressor manufacturers freely admit that their business is fully aware that DURACOOOL® cannot harm the system. Compressor manufacturers also freely admit that they do not return compressors when DURACOOOL® is installed, although their printed warranty states otherwise.

Are the DURACOOOL® products guaranteed?

Yes. DURACOOOL® LIMITED guarantees that the DURACOOOL® products will perform as an efficient refrigerant, and will not harm any air conditioning or refrigeration components and equipment.

Where is DURACOOOL® Manufactured?

The DURACOOOL® product is manufactured by DURACOOOL® LIMITED. DURACOOOL® is a company incorporated and operating in Alberta, Canada. DURACOOOL® has made Quality Control the over-riding goal, and offer comprehensive technical and back up service. The company is built on integrity and professionalism, and their distributors and employees reflect this in their work ethics and honesty.

Is DURACOOOL® all natural?

Yes, DURACOOOL® is absolutely all natural and organic. All components and additives are also natural and organic and the blends are fully “condensable” which means that they condense within the AC system.

Are hydrocarbons used in other areas of the world?

Overall, the experiences in Europe with ozone depletion and global warming have facilitated the need for government and industry to recognize and deal with the ever-growing environmental issues that face the planet. This has essentially galvanized many world leaders and governments to swing in behind the trend to hydrocarbon technology.

Overseas, there have been over 8 million domestic refrigerators and freezers manufactured out of Germany over the last few years alone, using hydrocarbon refrigerant.

The UK has adopted a new Standard (BS4344) that recognizes the use of hydrocarbons. The Danish government has embraced the use and development of hydrocarbons and applications. German technology is leading the world in applications of hydrocarbon technology in domestic refrigeration.

Most countries have embraced the commitment of the Kyoto agreement to phase out HFC's, that includes the R134a product, and all SNAP approved products. Most countries have recognized that the only alternative is hydrocarbons.

Have there been many automobiles converted to Hydrocarbons?

In Canada and the United States it is estimated that there have already been 5 million conversions to hydrocarbon refrigerants within automobiles.

What do you base your 5 million automotive conversion estimates on?

These estimates have been based solely on our sales for conversion.

Does DURACOOOL 12a® contain an additive?

Yes. It is a patented special mineral-based additive that we import especially for our manufacturing process. The additive is a hydrocarbon friction fighter, and a lubricant that enhances performance and safety to both DURACOOOL 12a® and the equipment that it operates in.

DURACOOOL® PRODUCTS
MOBILE A/C - FREQUENTLY ASKED QUESTIONS

Are there major differences between the DURACOOOL® product for automobiles (12a) and the HFC R134a product?
 Yes, incredibly so! This chart clearly illustrates the differences:

DURACOOOL®	HFC R134a
Non Global Warming (GWP negligible)	Global Warming (GWP of 3200 on Greenpeace calculations and publications)
Both products non-ozone depleting	
Non Toxic	<ul style="list-style-type: none"> ▪ Animal testing has indicated that with repeated exposure: <ul style="list-style-type: none"> ▪ Benign testicular tumors may develop ▪ Postmortem will indicate increased organ weights ▪ Human testing has indicated that with repeated and/or high concentration single exposure humans may experience any of the following: <ul style="list-style-type: none"> ▪ Reduced oxygen intake ▪ Temporary alteration of heart's electrical activity ▪ Irregular pulse / palpitations ▪ Inadequate circulation ▪ Heart irregularities ▪ Tremors and other central nervous system symptoms ▪ Unconsciousness or death ▪ Thermal decomposition (exposure to open flame, glowing metal surface) forms "hazardous" hydrofluoric acid and possibly carbonyl fluoride (both of which can cause severe central nervous system reactions)
Compatible with both mineral and synthetic oils, including PAG and ester oils.	Not compatible with mineral oils. Needs Ester and PAG oils. Ester oils are very hydroscopic. PAG oils are subject to toxic registration in certain states/regions.
Non corrosive	Highly Corrosive
Pressure "high side" of MVACS approx. 150 psi	Pressure "high side" on MVACS approx. 300 psi
Energy efficient compared to FREON R12	Not energy efficient compared to FREON R12

Why does DURACOOOL® have the scent of propane?

The additive “ethyl mercaptan” is actually a stench agent that is added for safety reasons. Mercaptan, as it is commonly known as, is added to natural gas, propane, butane and virtually all gases as an agent that will alert the user to any leakage. Mercaptan is also condensable in the AC system and cannot limit performance in any way and will not negatively impact components. The mercaptan smell is not detectable under regular working conditions or under normal install conditions.

What is the difference between regular propane and the refrigerant propane that is used to manufacture the DURACOOOL® products?

The propane that is regularly used for barbecues, and general consumer or commercial use is typically referred to as a “blow off” product because it is a byproduct of the hydrocarbon manufacturing process (the production and refining of raw oil products). The propane used for standard applications (such as your home barbecue) is not refined at all, and does not need to be. In order to utilize the product as “refrigerant grade” the product is further refined to render out methane gases and other impurities. This refrigerant propane is different in many ways, most notably is the disparity in the auto ignition.

Essentially this refining makes the product safer and more stable. The Auto ignition for regular grade propane is 842°F, while the DURACOOOL® product’s auto ignition is 1635°F.

TECHNICAL SUPPORT & CUSTOMER SUPPORT

Technical Support and Customer Support is available if you cannot locate the information you are seeking to find within this manual. The contact information, for Technical and Customer Support is listed below:

Deepfreeze Refrigerants Limited
144 Milvan Drive
Toronto, Ontario
M9L 1Z9

Phone: 416-741-2341
Toll free phone: 1-888-463-2665
Fax: 416-741-8938
Email: Duracool.deepfreeze@primus.ca
Web site: www.duracool.com