

Finding a cost-effective and available replacement for R-22 may be a challenge in today's market. Chadwell Supply is working hard to keep options in stock. However, all replacements are NOT created equal; they all have pros and cons to their use.

The key thing to remember is there is NO such thing as a "drop in" replacement. Unlike R-22, which is a single refrigerant, all of the replacements are blends of two or more refrigerants. As a result, **NONE of the replacement refrigerants should be used to "top-off" systems still running with R-22 and they should NOT be used interchangeably.** Instead, manufacturers instructions should be followed to change an R-22 unit to another refrigerant.

It is also important to know if a **leak is detected** in a system running one of these refrigerants, **the unit should NOT be topped off.** Since these are refrigerant blends, it is impossible to tell how much of each gas has leaked out. Adding new refrigerant on top of an unknown mix decreases the efficiency of the unit. Instead, the correct steps to maintain and keep the unit cooling as long as possible are:

1. Recover the refrigerant
2. Repair the leak
3. Recharge the system with brand new refrigerant

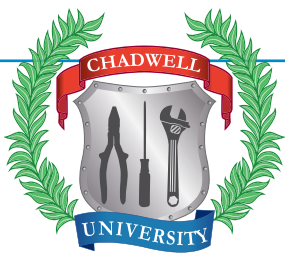
CHADWELL SUPPLY IN-STOCK R-22 REPLACEMENTS



	R-421A 107411 	NU-22B™ (R-422B) 107414 	R-422B+ 107417 	MO-99™ & R-438A 107412 107418 	407C 107415 
	<ul style="list-style-type: none"> ▶ No discernible difference in P&T to R-22 	<ul style="list-style-type: none"> ▶ NU-22B™ is brand name of R-422B 	<ul style="list-style-type: none"> ▶ Very similar to NU-22B™ ▶ P&T nearly identical to R-22, R-421A, & R-422B 	<ul style="list-style-type: none"> ▶ MO-99™ is brand name of R-438A 	<ul style="list-style-type: none"> ▶ Efficiency is closest to R-22 ▶ Requires oil change
	R-421A	NU-22B™ (R-422B)	R-422B+	MO99™ & R-438A	407C
Steps to retrofit from R-22:					
- Oil Change	Recommended	Recommended	Recommended	Recommended	Required
- Addition of POE Oil	Recommended	Recommended	Not Required	Recommended	Recommended
- Flush & Vacuum	✓	✓	✓	✓	✓
- New Valve Stems	✓	✓	✓	✓	✓
- Replace Line Dryer	✓	✓	✓	✓	✓
Retraining/education needed due to differences in P&T	Minimal	Necessary	Necessary	Necessary	Necessary
# of refrigerants in blend	2	3	3	5	3
Safe to drop-in/top off	No	No	No	No	No
Compatible Oils	Mineral AB POE	Mineral AB POE	Mineral AB POE	Mineral AB POE	POE

- ▶ EPA Certification is required to purchase all refrigerants.
- ▶ Retrofitting voids most manufacturers' warranties.

- ▶ Be sure to label the unit with retrofit refrigerant labels.



EPA 608 Certification Course Full Day Review and EPA608 Exams

Learn the regulations and procedures required by the EPA to handle refrigerant. Full day-class includes:

- ▶ Access to study materials prior to class
- ▶ Material review by expert instructors
- ▶ EPA 608 Exam (4 sections)

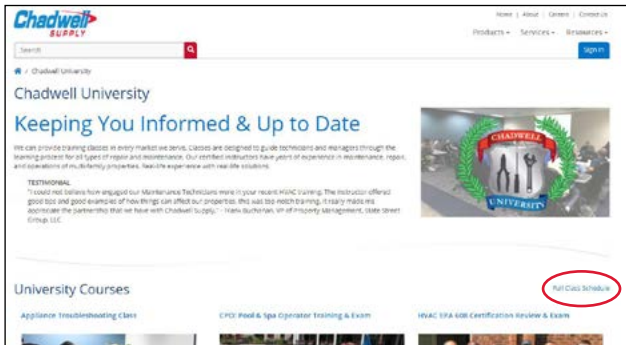
Study prior to attending the review course and taking exams is critical for success.

Class offerings & availability vary by location.

ChadwellSupply.com/University

VIEW SCHEDULE

Sort by class topic or by state so you can plan for the training opportunities coming to your area.



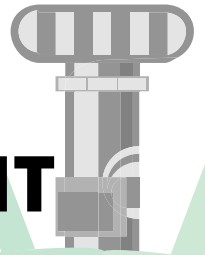
REGISTER FOR CLASSES

- ▶ **Classes hosted by Associations**, follow the link provided.
- ▶ **Classes hosted by Chadwell Supply**, you must register online using the course registration form.
 - **To invoice your account**, log into your Chadwell Supply account first.
 - **To pay with credit card**, click checkout.

FIND VIDEOS AND MORE ON
**REFRIGERANT TYPES AND
RECOVERY TIPS**

GO TO: chadwellsupply.com/pk-hvac

3 TIPS TO CONSERVE REFRIGERANT



Prices for refrigerant are at an all time high. Now, more than ever, focusing on ways to conserve refrigerant should be at the forefront of those servicing R-22 units.

1 Stop Topping Off Leaks

- Use a dye kit or leak detector to find the leak and repair it

-OR-

- Try a product such as A/C Leak Freeze to seal pinhole leaks

Then (and only then) should the system be recharged.

2 Recover and Reuse

When it's time to change out units, as long as there has not been a compressor burnout, make sure to properly evacuate and recover any old R-22 refrigerant.

Using a new recovery filter will help clean the R-22 and it's perfectly fine to use it in another unit on property.

3 Use It Properly

It may be tempting to find a less expensive alternative refrigerant, but that doesn't mean it is the best choice.

- For 410A, there is no alternative; so conserve where possible.
- For R-22 there are many alternatives (NU-22B, R-438A, MO-99, 407C, 421A, R422B+); however they are not created equal.

No matter which one(s) your property uses, **these refrigerants CANNOT be used interchangeably and should never be mixed in one unit.** If you need to use a different refrigerant, first evacuate and flush the system before adding in the new refrigerant.

