

WHAT ARE A2L REFRIGERANTS?

As the AC/R market transitions away from high global warming potential (GWP) refrigerants, A2L refrigerants have been approved by the EPA as suitable lower GWP options. These next generation refrigerants have a lower GWP than the current hydrofluorocarbon (HFC) refrigerants, however are mildly flammable per ASHRAE Standard 34. The most common A2Ls expected in the air conditioning market are R-32 and R-454B.^{1,2}

HOW IS SERVICING A2L SYSTEMS DIFFERENT?

The basic fundamentals and best practices when conducting a service call on A2Ls will not vary greatly compared to the current A1 refrigerants like R-410A. However, more attention should be paid to these best practices with added special considerations and A2L-rated tools.³

| ASHRAE STANDARD 34 | | |
|----------------------|--|---|
| HIGHER FLAMMABILITY | A3 R-50, R-170, R-290 R-600a, R-441a, R-1270 | B3 R-1140 |
| FLAMMABLE | A2 R-142b, R-152a | B2 R-30, R-40 |
| LOWER FLAMMABILITY | A2L HFO-1234yf, R-32, R-454B | BL2 R-717 |
| NO FLAME PROPAGATION | A1 R-11, R-22, R-134a, R-410a, R-449B, R-1234zd | B1 R-10, R-21 R-123, R-764 |
| | LOWER TOXICITY | HIGHER TOXICITY |

ARE NU-CALGON PRODUCTS COMPATIBLE WITH A2LS?

Yes, many of Nu-Calgon's products are used outside of the refrigerant circuit and are compatible with A2L equipment. And our internal treatments like EasySeal Ultimate and EasyDye are compatible with A2L refrigerants. Below are just a few of our notable A2L ready products.



REFERENCES:

- <https://www.epa.gov/climate-hfcs-reduction/background-hfcs-and-aim-act>
- https://www.ashrae.org/file%20library/technical%20resources/bookstore/factsheet_ashrae_english_november2022.pdf
- <https://e360blog.copeland.com/keys-to-servicing-a2l-refrigerants/>

