

MEMORANDUM: Preliminary 2013, 2014, 2015, and 2016 Sales and Distribution Data from the California Air Resources Board's Refrigerant Management Program

Figure 1. HCFC Refrigerants Sold or Distributed in California During 2013

	Pounds Sold/Distributed	Composition of Refrigerant/Blend				Total pounds by HCFC			
		R-22	R-123	R-124	R-142b	R-22	R-123	R-124	R-142b
R-123	57,450		100%				57,450		
R-124	1,140			100%				1,140	
R-22	4,516,284	100%				4,516,284			
R-401A	37,650	53%		34%		19,955		12,801	
R-401B	4,290	61%		28%		2,617		1,201	
R-402A	28,796	38%				10,942			
R-402B	338	60%				203			
R-408A	149,817	47%				70,414			
R-409A	32,755	60%		25%	15%	19,653		8,189	4,913
R-414A	0	51%		29%	17%	0		0	0
R-414B	41,554	50%		39%	10%	20,777		16,206	4,155
R-416A	1,980			40%				792	
R-502	4,255	49%				2,085			
CA Totals						4,662,930	57,450	40,329	9,069

Figure 2. HCFC Refrigerants Sold or Distributed in California During 2014

	Pounds Sold/Distributed	Composition of Refrigerant/Blend				Total pounds by HCFC			
		R-22	R-123	R-124	R-142b	R-22	R-123	R-124	R-142b
R-123	37,000		100%				37,000		
R-124	510			100%				510	
R-22	4,917,314	100%				4,917,314			
R-401A	45,690	53%		34%		24,216		15,535	
R-401B	2,105	61%		28%		1,284		589	
R-402A	23,681	38%				8,999			
R-402B	247	60%				148			
R-408A	142,993	47%				67,207			
R-409A	37,270	60%		25%	15%	22,362		9,318	5,591
R-414A	0	51%		29%	17%	0		0	0
R-414B	31,351	50%		39%	10%	15,676		12,227	3,135
R-416A	1,146			40%				458	
R-502	4,145	49%				2,031			
CA Totals						5,059,236	37,000	38,637	8,726

Figure 3. HCFC Refrigerants Sold or Distributed in California During 2015

	Pounds Sold/Distributed	Composition of Refrigerant/Blend				Total pounds by HCFC			
		R-22	R-123	R-124	R-142b	R-22	R-123	R-124	R-142b
R-123	40,000		100%				40,000		
R-124	30			100%				30	
R-22	4,004,220	100%				4,004,220			
R-401A	34,080	53%		34%		18,062		11,587	
R-401B	3,150	61%		28%		1,922		882	
R-402A	19,184	38%				7,290			
R-402B	104	60%				62			
R-408A	134,788	47%				63,350			
R-409A	29,282	60%		25%	15%	17,569		7,321	4,392
R-414A	0	51%		29%	17%	0		0	0
R-414B	15,747	50%		39%	10%	7,874		6,141	1,575
R-416A	980			40%				392	
R-502	4,210	49%				2,063			
CA Totals						4,122,412	40,000	26,353	5,967

Figure 4. HCFC Refrigerants Sold or Distributed in California During 2016

	Pounds Sold/Distributed	Composition of Refrigerant/Blend				Total pounds by HCFC			
		R-22	R-123	R-124	R-142b	R-22	R-123	R-124	R-142b
R-123	32,710		100%				32,710		
R-124	0			100%				0	
R-22	2,206,453	100%				2,206,453			
R-401A	17,053	53%		34%		9,038		5,798	
R-401B	1,200	61%		28%		732		336	
R-402A	11,929	38%				4,533			
R-402B	52	60%				31			
R-408A	78,560	47%				36,923			
R-409A	18,669	60%		25%	15%	11,201		4,667	2,800
R-414A	0	51%		29%	17%	0		0	0
R-414B	3,314	50%		39%	10%	1,657		1,292	331
R-416A	380			40%				152	
R-502	3,540	49%				1,735			
CA Totals						2,272,303	32,710	12,245	3,131

Key – In figures 1, 2, 3, and 4, the column on the far left lists different types of HCFC refrigerants and refrigerant blends. Directly to the right of that column is the number of pounds sold for each HCFC refrigerant and refrigerant blend. The next four columns break down the percentages of each HCFC refrigerant contained in each blend. The adjoining four column table converts these percentages into pounds for each HCFC refrigerant.

When reading the above figures, please take into account the following considerations:

- These tables cover most of the HCFC refrigerant sales in California, but there may be some missing data.
- Not included in the tables is the amount of refrigerant “pre-charged” into systems such as residential air-conditioning.
- Not included in the tables are internet sales, or any out-of-state sellers that ship directly to the refrigerant user.
- The extent of under-reporting is unknown.
- At the time of data acquisition, 20% of distributors had not reported for the 2016 calendar year.