

لیستی از شایعترین مبردهای مورد استفاده به همراه نام تجاری آنها و روغن مناسب و قابل استفاده با این مبردها و نقطه جوش آنها در فشار ۱ اتمسفر و نحوه استفاده از CHF ها و CFCH ها به عنوان جایگزین مبردهای CFC را در خود دارد.

<p>R500 Lubricant MO AB Temperature High + Medium Boiling point -33 C at 1 atm R12/R152a (74/26)% CFC</p>	<p>R502 Lubricant MO AB Temperature Low Boiling point -45 C at 1 atm R22/R115 (49/51)% CFC</p>	<p>R503 Lubricant MO AB Temperature Ultra Low Boiling point -88 C at 1 atm R23/R13 (40/60)% CFC</p>	<p>R507 Lubricant POE R502 Replacement Boiling point -47 C at 1 atm R125/R143a (50/50)% HFC</p>	<p>R508A Lubricant POE R13'R23'R503 Replacement Boiling point -86 C at 1 atm R23/R116 (39/61)% HFC</p>
<p>R508B Dupont Suva 95 Lubricant POE R13'R23'R503 Replacement Boiling point -88 C at 1 atm R23/R116 (46/54)% HFC</p>	<p>R509 Lubricant MO AB POE Temperature Medium Boiling point -40 C at 1 atm R22/R218 (44/56)% HCFC</p>	<p>R11 Lubricant MO AB Solvent Foam Blowing Refrigeration Boiling point +24 C at 1 atm CCL3F CFC</p>	<p>R12 Lubricant MO AB Temperature High + Medium Boiling point -30 C at 1 atm CCL2F2 CFC</p>	<p>R13 Lubricant MO AB Temperature Ultra Low Boiling point -81 C at 1 atm CCLF3 CFC</p>
<p>R21 Lubricant MO AB POE Temperature High Boiling point +9 C at 1 atm CHCL2F HCFC</p>	<p>R22 Lubricant MO AB POE Temperature High + Medium Boiling point -41 C at 1 atm CHCLF2 HCFC</p>	<p>R23 Lubricant POE Temperature Ultra Low Boiling point -82 C at 1 atm CHF3 HFC</p>	<p>R113 Lubricant MO AB Solvent Refrigeration Boiling point +47 C at 1 atm C2CL3F3 CFC</p>	<p>R114 Lubricant MO AB Foam Blowing Refrigeration Boiling point +4 C at 1 atm C2CL2F4 CFC</p>
<p>R401A Dupont Suva Mp39 Lubricant MO AB POE R12 Replacement Avg , Boiling point -33 C at 1 atm R22/R152a/R124 (53/13/34)% HCFC</p>	<p>R401B Dupont Suva Mp39 Lubricant MO AB POE R12 Replacement Avg , Boiling point -35 C at 1 atm R22/R152a/R124 (61/11/28)% HCFC</p>	<p>R401C Dupont Suva Mp39 Lubricant MO AB POE R12 Replacement Avg , Boiling point -23 C at 1 atm R22/R124/R152a (33/52/15)% HCFC</p>	<p>R402A Dupont Suva Mp39 Lubricant MO AB POE R502 Replacement Avg , Boiling point -49 C at 1 atm R125/R290/R22 (60/2/38)% HCFC</p>	<p>R402B Dupont Suva Mp39 Lubricant MO AB POE R502 Replacement Avg , Boiling point -47 C at 1 atm R125/R290/R22 (38/2/60)% HCFC</p>
<p>R403A Lubricant MO AB POE R502 Replacement Avg , Boiling point -50 C at 1 atm R22/R218/R290 (75/20/5)% HCFC</p>	<p>R403B Rhodia isceon 69L Lubricant MO AB POE R502 Replacement Avg , Boiling point -51 C at 1 atm R290/R22/R218 (5/56/39)% HCFC</p>	<p>R404A Atofina FX70 Dupont Suva Hp62 Lubricant POE R502 Replacement Avg , Boiling point -46 C at 1 atm R125/R143a/R134a (44/52/4)% HFC</p>	<p>R405A Lubricant MO AB POE R12 Replacement Avg , Boiling point -33 C at 1 atm R22/R142b/R152a/R318 (45/6/7/42)% HCFC</p>	<p>R406A Lubricant AB POE R12 Replacement Avg , Boiling point -33 C at 1 atm R22/R124b/R600a (55/41/4)% HCFC</p>

<p>R407A 1cl Klea 60 Lubricant <u>POE</u> R12 Replacement</p> <p>Avg , Boiling point -46 C at 1 atm R32/R125/R134a (20/40/40)%</p> <p>HFC</p>	<p>R407B Lubricant <u>POE</u> R502 , R12 Replacement</p> <p>Avg , Boiling point -48 C at 1 atm R32/R125/R134a (10/70/20)%</p> <p>HFC</p>	<p>R407C 1cl Klea 66 Dupont Suva 9000 R22 Replacement</p> <p>Avg , Boiling point -44 C at 1 atm R32/R125/R134a (23/25/52)%</p> <p>HFC</p>	<p>R407D Lubricant <u>POE</u> Temperature medium</p> <p>Avg , Boiling point -39 C at 1 atm R32/R125/R134a (15/15/70)%</p> <p>HFC</p>	<p>R408A Lubricant MO AB <u>POE</u> R502 Replacement</p> <p>Avg , Boiling point -44 C at 1 atm R125/R143a/R22 (7/46/47)%</p> <p>HCFC</p>
<p>R409A Atofina fx56 Lubricant MO AB <u>POE</u> R500 ‘ R22 Replacement</p> <p>Avg , Boiling point -35 C at 1 atm R22/R124/R142b (60/25/15)%</p> <p>HCFC</p>	<p>R409B Lubricant MO AB <u>POE</u> Temperature High + Medium</p> <p>Avg , Boiling point -35 C at 1 atm R22/R124/R142b (65/25/10)%</p> <p>HCFC</p>	<p>R410A Lubricant <u>POE</u> R22 Replacement</p> <p>Avg , Boiling point -51 C at 1 atm R32/R125 (50/50)%</p> <p>CFC</p>	<p>R411A Lubricant MO AB <u>POE</u> R22 Replacement</p> <p>Avg , Boiling point -40 C at 1 atm R22/R152a/R1270 (87/11/2)%</p> <p>HCFC</p>	<p>R411B Lubricant MO AB <u>POE</u> R502 Replacement</p> <p>Avg , Boiling point -42 C at 1 atm R22/R152a/R1270 (94/3/3)%</p> <p>HCFC</p>
<p>R412A Lubricant MO AB <u>POE</u> R500 Replacement</p> <p>Avg , Boiling point -36 C at 1 atm R22/R152a/R1270 (70/25/5)%</p> <p>HCFC</p>	<p>R413A Lubricant MO AB <u>POE</u> R12 Replacement</p> <p>Avg , Boiling point -35 C at 1 atm R218/R134a/R600a (9/88/3)%</p> <p>HFC</p>	<p>R414A Lubricant MO AB <u>POE</u> R12 Replacement</p> <p>Avg , Boiling point -0 C at 1 atm R22/R124a/R600a/R142b (51/28.5/4/16.5)%</p> <p>HCFC</p>	<p>R414B Lubricant MO AB <u>POE</u> R12 Replacement</p> <p>Avg , Boiling point -0 C at 1 atm R22/R124/R600a/R142b (50/39/1.5/9.5)%</p> <p>HCFC</p>	<p>R416A Lubricant <u>POE</u> R12 Replacement</p> <p>Avg , Boiling point -25 C at 1 atm R134a/R124/R600 (59/39.5/1.5)%</p> <p>HCFC</p>
<p>R417A Rhobia isceon 59 Dupont Suva M059 Lubricant MO AB <u>POE</u> R22 Replacement</p> <p>Avg , Boiling point -42 C at 1 atm R125/R134a/R600 (47/50/3)%</p> <p>HFC</p>	<p>R422A Rhobia isceon 79 Dupont Suva M059 Lubricant MO AB <u>POE</u> R22 ,R502 Replacement</p> <p>Avg , Boiling point -47 C at 1 atm R134a/R125/R600a (12/85/3)%</p> <p>HFC</p>	<p>R423A Rhobia isceon 39TC Dupont Suva 39TC Lubricant <u>POE</u> R12 Replacement</p> <p>Avg , Boiling point -25 C at 1 atm R134a/R27ea (52.5/47.5)%</p> <p>HFC</p>	<p>----- Rhobia isceon 29 Dupont Suva MO29 Lubricant MO AB <u>POE</u> R22 Replacement</p> <p>Avg , Boiling point -47 C at 1 atm R134a/R125/R600a (32/65/3)%</p> <p>HFC</p>	<p>----- Rhobia isceon 89 Dupont Suva MO89 Lubricant MO AB <u>POE</u> R13B1 Replacement</p> <p>Avg , Boiling point -47 C at 1 atm R125/R218/R290 (86/9/5)%</p> <p>HFC</p>

<p>R123 Lubricant MO AB R11 Replacement Boiling point +28 C at 1 atm C2HCL2F3</p> <p>HCFC</p>	<p>R124 Lubricant MO AB R114 Replacement Boiling point -11 C at 1 atm C2HCLF4 HCFC</p>	<p>R125 Lubricant <u>POE</u> R115 Replacement Boiling point -48 C at 1 atm C2HF5</p> <p>HFC</p>	<p>R134A Lubricant <u>POE</u> <u>PAG</u> R12 Replacement Boiling point -26 C at 1 atm C2H2F4</p> <p>HFC</p>	<p>R141B Lubricant MO AB R11 Replacement Boiling point +32 C at 1 atm C2H3CL2F4</p> <p>HCFC</p>
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<p>R142B Lubricant MO AB R114 Replacement Boiling point -10 C at 1 atm C2H3CLF2</p> <p>HCFC</p>	<p>R125A Lubricant <u>POE</u> R12 Replacement Boiling point -25 C at 1 atm C2H4F2</p> <p>HFC</p>	<p>R236FA Lubricant <u>POE</u> R114 Replacement Boiling point -2 C at 1 atm C2H2F6</p> <p>HFC</p>	<p>R600A (Iso Butane) Lubricant MO AB Temperature High Boiling point -12 C at 1 atm C4H10 HC</p> <p>R600</p>	<p>R717 Lubricant MO PAO Temperature Medium + Low Boiling point -33 C at 1 atm</p> <p>NH3</p>
<p>R744 Lubricant MO PAO Temperature High Sublimation point -78 C at 1 atm</p> <p>CO2</p>	<p>R16</p>	<p>R290</p>	<p>R600</p>	<p>R218</p>