

Use of Polar Mobile Phase Solvents

Column	MeOH	EtOH	IPA	ACN (NO ALKANE)	Acid (note 3)	Base (note 3)	Water
AD	<u>0 to 15% OR 60 to 100%</u> Total Alcohol in Alkane (Note 1)	<u>0 to 15% OR 60 to 100%</u> EtOH in Alkane	0 to 100% IPA in Alkane	0 to 100% in IPA ---- 0 to 15% EtOH or MeOH in ACN	TFA <0.5%, (prefer <0.2%)	DEA or TEA <0.5%, (prefer <0.2%)	<5%
AD-RH	20 to 100% MeOH in Water	20 to 100% EtOH in Water	20 to 100% IPA in Water	20 to 100% ACN in Water	pH 2 to 7	<u>Nonaqueous:</u> DEA <0.5%, (prefer <0.2%) <u>Aqueous:</u> Borate pH <9	0 to 80%
AS	0 to 100% Total Alcohol in Alkane (Note 1)	0 to 100% EtOH in Alkane	0 to 100% IPA in Alkane	0 to 100% in Alcohol	TFA <0.5%, (prefer <0.2%)	DEA/TEA <0.5%, (prefer <0.2%)	< 5%
OD/ OD-H	0 to 100% Total Alcohol in Alkane (Note 1)	0 to 100% EtOH in Alkane	0 to 100% IPA in Alkane	Use OD-R	TFA <0.5%, (prefer <0.2%)	DEA/TEA <0.5%, (prefer <0.2%)	Use OD-R
OD-R (Note 2)	100% MeOH --- 20 to 80% MeOH in Water	100% EtOH --- 20 to 80% EtOH in Water	100% IPA --- 20 to 80% IPA in Water	20 to 80% ACN in Water	pH 2 to 7	<u>Nonaqueous:</u> DEA <0.5%, (prefer <0.2%) <u>Aqueous:</u> Borate pH <9	0 to 80%
OJ	Prefer OJ-RH	0 to 100% in Alkane 0 to 100% in <u>MeOH, IPA</u>	0 to 100% in Alkane --- 0 to 100% in <u>MeOH, EtOH</u>	Use OJ-RH	TFA <0.5%, (prefer <0.2%)	DEA/TEA <0.5%, (prefer <0.2%)	Use OJ-R
OJ-RH	100% MeOH --- 20 to 80% MeOH in Water	100% EtOH --- 20 to 80% EtOH in Water	100% IPA --- 20 to 100% IPA in Water	0 to 100% in Alcohol; --- 20 to 80% in Water	pH 2 to 7	<u>Nonaqueous:</u> DEA <0.5%, (prefer <0.2%) <u>Aqueous:</u> Borate pH <9	0 to 80%

Notes:

- When converting from "alkane mp" to "polar mp", flush with IPA for at least 3 column volumes @ <40 bar.
1. Mix MeOH with equal volume EtOH to dissolve in alkane.
 2. Alkanes are not recommended as mobile phase for OD-R.
 3. DEA and TFA have a memory effect on the column.