Best Practices

Solvents:

• Use clean borosilicate bottles only
• Prepare solvent volume to be used up within 1 – 2 days
• Use only HPLC-grade or better solvents filtered through 0.2 µm filters
• Label bottles correctly
• Reduce risk of exposure to direct sun light by using brown bottles

Powering up the pump:

• Use fresh solvents and solvent bottles
• Inspect solvent bottles and inlet filters for damages or coloring
• Check function and settings of the seal wash

Preparing the pump:

• Purge the pump to remove old solvent, salt deposits or particulate matter
• Condition the system with appropriate conditioning method

Daily tasks:

• Replace water based mobile phases daily
• Replace organic mobile phases every 2nd day
• Check seal wash solvent
• Use the Conditioning function with composition of your application

Weekly tasks:

• Change seal wash solvent and bottle
• Inspect solvent filters
• Flush all channels to remove salt deposits and particulate matter
• Check system backpressure and change filters if necessary

Pump shut-down:

• Flush all channels to remove salt deposits and particulate matter
• Flush the system with appropriate storage solvent
• Power down the system
Seal Wash (usage mandatory when installed)

Benefits of Seal Wash Operation:
- Removal of particles and salt crystals, which might potentially damage the seals
- Lubrication of seal/piston interface
- Cooling of pistons

Seal Wash Operation:
- PERIODIC operation, e.g. 0.5 min every 7 min
- Use 10 % 2-Propanol in water (100 % 2-Propanol for normal phase applications)
- Position wash solvent bottle above and waste bottle below instrument
- Exchange solvent weekly. Do not recycle seal wash solvent
- Test Peristaltic Pump

Seal Wash Dialog in OpenLab Software (1290 Infinity Pumps only):
- Seal Wash settings are NO method parameters
- Find dialog under CONTROL
- On ERROR – seal wash is switched off
- At Power Off – seal wash is switched off

Seal Wash in 1290 Infinity II Pumps:
- PERIODIC operation for 0.5 min every 7 min when pump is switched on
- Controlled by the seal wash sensor
- Guided out to the waste on the right side