PurIon Flash Mass Installation Requirements

for CombiFlash® Rf Systems

Chromatography Technical Note TN22

Company:

Shipping Address:	Contact:	Phone:
		Email:

Overview

This document provides general installation requirements and site preparation for the PurIon Flash mass spectrometer as part of a CombiFlash Rf system.

☑ *Note*

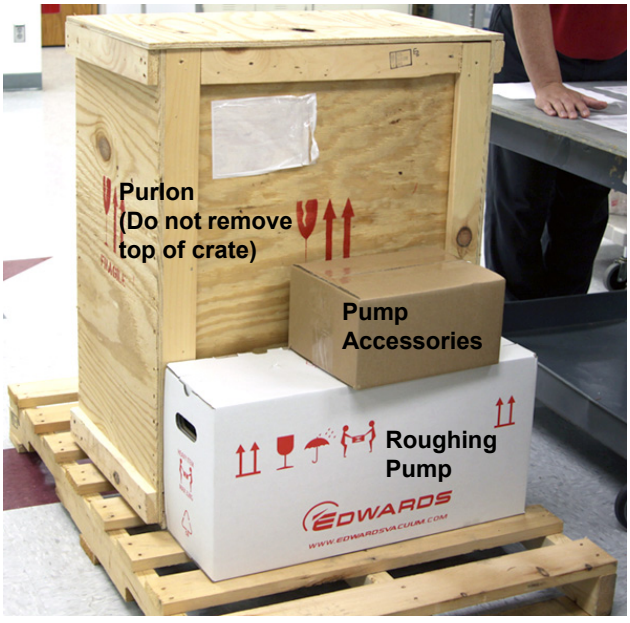
If ordered, the Rf unit will be shipped separately.

Receiving

The facility must be able to accept pallet deliveries of a minimum 102 x 127 cm (40 x 50"). The PurIon Mass Spectrometer, roughing pump, and pump accessories will each be in a separate container together on a single pallet. The PurIon will be shipped in a wooden crate with dimensions of 28.5 x 18 x 35 in (LxWxH). A power screwdriver is recommended for unpacking the system.

⚠ CAUTION

Do not remove the top of the crate.



Specifications

Table 1: Physical Specifications

CombiFlash Rf		
H x W x D	61 x 36 x 43 cm	24 x 14.1 x 17"
Weight	< 31 kg	< 68 lb
PurIon Mass Spectrometer		
H x W x D	66 x 37 x 56 cm	26 x 14.5 x 22"
Weight	< 35 kg	< 83.7 lb
Place the PurIon on the left of the Rf, with a gap of at least 2 cm between for proper air flow. Isolate the PurIon from any external vibration, such as from the rough pump.		
Rough Pump		
H x W x D	46 x 23 x 46 cm	18 x 9 x 18.1"
Weight	< 32 kg	< 70.5 lb
Ensure that the site glass is visible in order to monitor oil level.		

Table 2: Laboratory Requirements

Environment		
Temperature	Recommended range: Maximum range:	20 - 30 °C 15 - 40 °C
Humidity	< 90%	
Always maintain adequate ventilation to control vapors and pump exhaust.		
Electrical		
Nominal Voltage	± 10% (Example: 117VAC ± 11.7VAC)	
Maximum Consumption	< 1,000 VA	
Two (2) outlets are required.		
Nitrogen		
Purity	≥ 98%	
Pressure	4.2 - 8.3 bar	60 - 120psi
Gas Consumption	< 8 l/min, maximum. 4 l/min, typical.	
System Connection	3 m of 6 mm (.25") ø, semi-rigid tubing	
NOTE: Provisions for connecting this tubing to the nitrogen source are the responsibility of the user.		
Solvents		
Mass Spec Carrier Operating Flow Rate	.2 ml/min	
The MS carrier solvent must be miscible w/ the solvents used by the flash separation. Recommended: LCMS-Grade methanol w/ .1% formic acid. The system includes a bottle cap with GL-45 threads, commonly used on media bottles such as the 500 ml Wheaton #219929. Recommended user-supplied bottle ø < 3.8 cm.		
Ensure that adequate space is provided for the flash system solvent supply bottles & waste containers.		

Last modified July 30, 2014

Teledyne ISCO
P.O. Box 82531, Lincoln, Nebraska, 68501 USA
Toll-free: (800) 775-2965 • Phone: (402) 464-0231 • Fax: (402) 465-3001
E-mail: IscoService@teledyne.com