

Office of Laboratory Safety

2300 | Street, NW Ross Hall, Suite B-05 Washington, DC 20037 t. 202-994-8258 | labsafety@gwu.edu

Checklist for Aerosol Tightness of Rotors

Centrifuge Vessel	Yes
Is the vessel resistant to the liquid inside? If not, change and use another vessel.	
Can the vessel material withstand the speed applied during the centrifuge run? If not, change the vessel.	
Is the vessel free of any cracks? If not, use a fully functional vessel.	
Does the centrifuge vessel fit into the centrifuge's rotor bores? If not, use a vessel that has a better fit in the rotor bores.	
Rotor	Yes
Are the rotor and the lid free of any visible cracks or microcracks? If not, replace the damaged part.	
Is the rotor free of any visible impurities or salt residues? If not, clean the rotor according to the manufacture's recommendations.	
Is the rotor and the lid resistant to the liquid you want to centrifuge? If not, can you use a more harmless liquid for your application?	
Is the rotor's sealing ring free of damages in any way? Is the ring still in one piece? If not, replace the rotor's sealing ring.	
Autoclaving the rotor: How many times has the rotor been autoclaved? Rotors are generally only resistant for a certain number of autoclaving cycles. Plastic rotors have to be replaced after just 20 autoclaving cycles. With aerosol-tight metal rotors, generally only the sealing ring must be replaced.	
Loading	Yes
Has the rotor been loaded correctly? Avoid imbalances during the run. Imbalances do, of course, have a big impact on the integrity of the rotor.	