

Technical Data Sheet

CryoVial®

#61800-61802

Introduction

Vials are made of polypropylene and sterilized by gamma radiation. Note: Some models may contain silicone washers. Vials can withstand temperatures from +121°C down to -196°C, but should be stored only in the gas phase of liquid nitrogen. When freezing, volumes should not be filled to capacity, rather, filled to about 10% less than listed capacity.

Instructions

1. DO NOT fill the vial to capacity. Fill only to about 90% of the tube's volume, as indicated by the fill line on the vial, to allow for sample expansion.
2. Freeze the whole vial at the same temperature. NOTE: When using stands or racks, ensure that they do not create any partially insulating effect.
3. Move the vial periodically during freezing to reduce the risk of supercooling and subsequent quick ice formation.
4. When freezing in the gas phase of liquid nitrogen, tighten the vial screw cap normally, as over-tightening will squeeze the silicone packing out between the tube and may leak.
5. The thread of the vial and screw cap must be completely dry before closing; any liquid drops will impair the seal in the gas phase of liquid nitrogen.
6. All cryogenic vials should always be stored in the gas phase, above liquid nitrogen. Should they be immersed, they might develop leaks or even shatter when they return to room temperature. Biohazard materials could then be released.
7. ALWAYS use safety equipment such as gloves, hoods, face shields, etc., when removing vials from liquid nitrogen containers.
8. Thaw vial in a water bath of 37 to 40°C, keeping it in constant motion. Remove the vial from the water bath as soon as the ice has melted.