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7.1.3 Centrifuges should be repaired only by the manufacturer or authorized dealer representative. Do not attempt repairs. Centrifuges in need of repair should be tagged and locked-out while awaiting service.

7.2 Rotor Care and Use

7.2.1 If the rotor is not kept clean and chemicals remain on the rotor, corrosion will result. Moisture left for extended periods of time can also initiate corrosion. It is important that the rotor is left clean and dry after use. (Wash with mild detergent and warm water using a nylon bottle brush, if necessary). Dry the rotor thoroughly and store upside down with the cover and tubes removed.

7.2.2 Do not autoclave rotors at temperatures above 100°C.

7.2.3 To avoid corrosion, do not expose aluminum rotor components to strong acids or bases, alkaline lab detergents, or salts (chlorides) of heavy metals (e.g., cesium, lead, silver or mercury).

7.2.4 Check that the centrifuge chamber, drive spindle, and tapered mounting surface of the rotor are clean and free of scratches or burrs.

7.2.5 Damaged rotors must not be used.

7.2.6 Wipe drive surfaces prior to installing the rotor.

7.2.7 Make sure rotor, tubes, and spindle are dry and that the rotor is properly seated and secured to the drive hub. Do not operate the centrifuge without the appropriate rotor cover securely fitted with seals in place.

7.2.8 If the temperature of the chamber is below room temperature, pre-cool the rotor to the lower temperature before securing the rotor (this will minimize the chance of it seizing to the tapered spindle).

7.2.9 Always complete the machine log book since the number of hours of operation determines the life of the rotor.

7.2.10 High-speed rotor heads are prone to metal fatigue. Each rotor should be accompanied by its own logbook indicating the number of hours run at top or derated speeds. Do not exceed the design mass for the maximum speed of the rotor. Failure to observe this precaution can result in dangerous and expensive rotor disintegration.

7.2.11 Never exceed the state maximum speed for any rotor.

7.2.12 De-rate the rotor speed whenever a) the rotor speed/temp combination exceeds the solubility of the gradient material and causes it to precipitate, or; b) the

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8.0 CONTINGENCIES:

- 8.1 In case of a fire, explosion, or gas leak evacuate individuals from the area and call the emergency response (911). Notify supervision and adjacent personnel as quickly as possible. Observe appropriate procedures for personal injury or fire as provided in EHS Web site.
- 8.2 In case of a chemical spill, alert others in the immediate vicinity and notify your supervisor. Determine the severity of the spill and proceed as appropriate. Small spills may be cleaned up by laboratory personnel. For large spills, notify EHS (578-5640) and Campus Police (911 or 578-3231). If possible to do so safely (without risk of over-exposure), take action to stop the release. Ensure that extraneous personnel remain at a safe distance until the spill is completely cleaned-up

9.0 REVIEWS AND REVISIONS:

This procedure shall be reviewed for compliance and effectiveness and revised as necessary on an annual basis.

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