Biology and Wildlife

STANDARD OPERATING PROCEDURE

Polyacrylamide Gels

This SOP addresses only this type of gel. Users must also follow the electrophoresis SOP and any other SOPs relevant to their particular procedure (e.g. UV light box use, ethidium bromide, etc.).

Location(s): Murie 204, 206, 306

Chemical(s): varies; consult the SDS for the manufacturer

Specific Hazards:
Solutions containing acrylamide monomers are used to make polyacrylamide gels (made of acrylamide polymers). The polymerized form of acrylamide is not considered toxic, but fresh gels can contain some unpolymerized monomers. Acrylamide (monomer) is a neurotoxin, and may also be mutagenic, carcinogenic, and cause damage to fertility and/or fetuses. Acrylamide is also an EPA Hazardous Air Pollutant specified in the Clean Air Act of 1963.

Generally speaking, most pre-cast gels are labeled as below known thresholds to be labeled as hazardous material. In this case, gels that are not contaminated with other hazardous materials (e.g. ethidium bromide) can be disposed of as regular trash.

Because of the variability in contents and hazards of these types of gels, instructors and TAs must carefully read the SDS for the gels to be used and follow any specific instructions contained in the SDS. Instructors and TAs may also consult with the Laboratory Supervisor on any questions or concerns, including what PPE is required and what disposal method is appropriate.

The hazards are more pronounced when casting the gels from the raw materials because of the acrylamide monomer. Because of this, Biology and Wildlife requires purchasing precast acrylamide or polyacrylamide gels when they will be used.

Contact Information:

Laboratory Supervisor:	Patrick Knavel	pdknavel@alaska.edu	474-5622
Laboratory Technician:	Rosa Villarreal	rvvillarreal@alaska.edu	474-7205

Training Record

I, the undersigned, have read and understand the above SOP. I have been trained to carry out this procedure and will follow the above SOP. I agree to contact my Supervisor and the Biology and Wildlife Laboratory Supervisor if I want to modify this procedure and obtain permission for any modifications before implementing them.

Name	Signature	Date	Person Providing Training

Prepared by: Denise Kind **Date:** 5/22/2015

Reviewed by: Tracey Martinson **Date:** 7/24/2015