STANDARD OPERATING PROCEDURE
for
FORMALDEHYDE

Location(s) of use: ___________________________________________________

Chemical(s): Formaldehyde, CAS 50-00-0

Specific Hazards: GHS Classification: Flammable Liquid Category 4, Acute Toxicity (Oral) Category 3, Acute Toxicity (Dermal) Category 3, Acute Toxicity (Inhalation) Category 2, Skin Corrosion/Irritation Category 1B, Serious Eye Damage Category 1, Skin Sensitizer Category 1, Carcinogen Category 2, Acute Aquatic Hazard Category 3

1. Storage: Materials will be stored according to compatibility and label recommendations in a designated area: ________________________________. Periodic inventory reductions will be scheduled.

2. Authorized personnel: Use of this material requires prior written approval from the PI or ______________________, Title: ________________. Use will be limited to the following personnel (check all that apply):

   Principal Investigator ____ Graduate students ____
   Technical staff ____ Post doctoral employees ____ Undergraduates ____
   Other (describe) _______________________

3. Training requirements:
   Annual training is required by OSHA standard 29CFR 1910.0148 for employees exposed to formaldehyde at 0.1% concentration or greater. (There are exceptions to this requirement in certain laboratory situations). Training is available thru EH&S, both live and on-line.

   Use location: Materials shall be used only in the following designated areas in room ______. Check all that apply:
   demarcated area in lab (describe)________________________________________
   fume hood ____ glove box ____ other (describe) _______________________

4. Personal protective equipment: All personnel are required to wear the following personal protective equipment whenever handling this material (check all that apply):

   ___________________________
Chemical safety goggles __X__  Face shield __X__

Gloves (type/use):

*Incidental Contact:* double glove with nitrile gloves (4 mil) or use 8 mil or thicker nitrile gloves

*Extended Contact:* use 8 mil or thicker nitrile gloves

Lab coat _____X____  Respirator (type) ______________  Other (describe) ___________________

5. **Waste disposal:** The authorized person using this material is responsible for the safe collection, preparation and proper disposal of waste unless otherwise stated below. Waste shall be disposed of as soon as possible and in accordance with all laboratory and University procedures.

6. **Decontamination:** Specific instructions: Wash hands thoroughly after each use. Remove contaminated clothes and place them in well a ventilated space - the formaldehyde will off-gas. Contaminated clothes may be washed for faster decontamination.

7. **Exposures:** The perception of formaldehyde by odor and eye irritation becomes less sensitive with time. This can lead to overexposure if worker is relying on formaldehyde's warning properties to alert him. Persons with a history of skin or eye disorders; liver, kidney or respiratory disorders may be at increased risk from exposure.

**Skin contact**
Symptoms: Causes redness, pain.
first aid: Immediately flush skin with water for at least 15 min. Seek medical attention if necessary.

**Eye contact**
symptoms: Causes redness, pain, blurred vision, blindness.
first aid: Immediately flush skin or eyes with water for at least 15 min. Seek medical attention if necessary.

**Inhalation**
Symptoms: May cause sore throat, coughing and shortness of breath. Causes irritation of respiratory tract. A concentration of 20 ppm or greater is considered to be immediately dangerous to life or health.
First aid: Remove to fresh air immediately. If not breathing, give artificial respiration. Get medical attention immediately while performing emergency first aid.

**Ingestion**
symptoms: Causes severe abdominal pain, violent vomiting.
first aid: Induce vomiting immediately by giving two glasses of water, or milk if available, and sticking finger down throat. Seek medical attention.

10. **Spills:** Spill cleanup materials to be used, location of materials, PPE to be used, disposal of cleanup materials, etc. Please be as complete as possible:
Ventilate area. For small spills (up to 50 ml. of 37% material), soak up with spill absorbent material immediately. Store collected spill material in a zippered plastic bag or wide mouth plastic container with a tight-fitting lid for disposal by EHS. For a large spill, ventilate the area of the spill and leave the room. Do not attempt to clean up a large spill unless you have Cornell EH&S approved respiratory protection and training spill response.

11. Phone numbers:
Cornell Campus Police 911 (accidents, spills)
Gannett Health Center 5-5155

12. Other: Special precautions, incompatible/reactive materials, usable shelf life, etc. Please be as specific as possible:
Keep in tightly closed container. Prevent any physical damage to the container. Keep away from heat, sparks, and flame. Keep separate from oxidizing materials and alkalies. Reacts violently with nitrogen dioxide, perchloric acid/aniline mixtures and nitromethane. Protect from freezing; avoid low temperatures as nonhazardous polymerization may occur.

Prepared by: ________________________________
Date: ________________
Reviewed/Revised: ________________