

## Standard Operating Procedures for Paraquat

### For Emergencies Refer to the Safety Data Sheet

#### Hazards:

Extremely toxic- inhalation (0.1 mg/m<sup>3</sup> exposure limit for humans)

Toxic- ingestion and skin absorption

Environmental Hazard- aquatic toxicity

#### Chemical handling instructions:

##### Personal Protective Equipment (PPE):

Those handling Paraquat must wear chemically resistant gloves, lab coat, eye protection, and appropriate lab attire. A half face/full face respirator with Organic Vapor cartridges is required if the substance is spilled or manipulated outside of a chemical fume hood.

##### Preparing Paraquat solutions:

1. Paraquat solutions must always be prepared inside a certified chemical fume hood.
2. The work area should be prepared by laying down an absorbent work surface with the absorbent material facing up. Tape the edges of the absorbent material to prevent its movement in the fume hood.
3. Care should be taken to not generate any aerosol during the preparation or injection procedure. Always wash hands after removing gloves following handling Paraquat.
4. Some objects (absorbent pads) must be bagged for disposal as hazardous waste.
5. If a spill occurs, leave materials in the fume hood, close the sash, and contact the Safety Office immediately at x2697 for assistance in cleaning the area.

##### Waste Disposal:

1. Any leftover/unused Paraquat should be collected for disposal as hazardous waste.
2. All disposable materials contaminated with the chemical and residual chemical must be disposed of as hazardous waste.
3. Used needles/syringes should be disposed in a sharps container destined for incineration.
4. Contact the Safety Office at x2697 or [SafetyOffice@unthsc.edu](mailto:SafetyOffice@unthsc.edu) for hazardous waste pickup.

#### Animal Experiments

##### Injecting animals with Paraquat:

1. Animals must be injected within a designated fume hood.
2. Animal handlers must wear PPE as described above.
3. Extra care must be taken to prevent aerosol generation. The LC50 for rat is 0.0006mg/l air
4. All needles must be disposed of in sharps container – do not recap or bend needles.
5. Dispose of waste as described above.

##### Cage handling:

Updated 10/23/2017

No special requirements for cage handling.