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| --- | --- | --- | --- |
| **Chemical** | **Biological** | **Equipment** | **Other** |
| Acutely toxic chemicals | Biotoxins handling | Anaerobic chamber | Cleaning Glassware |
| Aqua Regia | Cytotoxins | Analytical equipment (I.e. FTIR, GPC, etc) | Chemical storage |
| Asphyxiants | Decontaminating | Autoclave operation | Electrical safety |
| Bases – Hydroxides | Formaldehyde for tissue and cell fixation | Centrifuge (rotating equipment) | Lab/equipment shut down and restart |
| Carincogens | Group 2 Biological Materials Storage | Compressed gas cylinder | Potentially explosive experiments |
| Combustible metals | Handling of human and monkey tissue samples | Dry environments (I.e. Schlenk lines, glove boxes, glove bags) | Radioactive materials |
| Corrosive chemicals | Microbial aerosols | Fume hoods | Scaling up a procedure |
| Cryogens | Vacuum lines | Lasers | Synthesis procedures unique to your lab |
| DEA controlled substances | Working with bacteria biofilms | Needle recapping/handling | Ultraviolet Radiation |
| Diazomethane |  | Ovens and hotplates | Vacuum systems |
| Flammable liquids |  | Rotary evaporator | Waste |
| Hydrofluoric acid |  | Solvent dispensing |  |
| Mercury |  | SpeedVac concentrator operation |  |
| Nanomaterials |  |  |  |
| Nitric acid (especially waste procedures) |  |  |  |
| Oxidizers |  |  |  |
| Peroxide forming chemicals |  |  |  |
| Piranha solutions |  |  |  |
| Pyrophorics |  |  |  |
| Quenching reactive organometallic reagents |  |  |  |
| Sodium azide |  |  |  |
| Toxic gases |  |  |  |
| Water reactive chemicals |  |  |  |