

The University of Texas at Tyler Environmental Health and Safety

BIOLOGICAL AGENT REFERENCE SHEET

| Characteristics | |
|-------------------|---|
| Risk Group | 2 - Agents that are associated with human disease which is rarely serious and for which preventive or therapeutic interventions are often available. These agents represent a moderate risk to an individual but a low risk to the community. |
| Agent Type | Biohazard |
| Description | Aspergillus fumigatus is a fungus of class Euascomycetes. This funus is of growing concern as a pathogen in mammals, especially in immunocompromised individuals. It grows rapidly and found in many environments. Antifungal resistance to some modern antifungal medications has been reported. ref. Aspergillus fumigatus. NCBI. Genome; https://www.canada.ca/en/publichealth/services/laboratory-biosafety-biosecurity/pathogen-safety-data-sheets-risk-assessment/aspergillus.html |
| Host Range | Humans and other animals |
| Exposure route | Inhalation, contact on broken skin or mucous membranes; ingestion |
| Incubation period | 2 days to 3 months |

| Laboratory Hazards | |
|--------------------|---------------------------------------|
| High Energy | Centrifugation, sonication, vortexing |

| Sharps | Needles, broken glass |
|--------------|--|
| Aerosols | Shaking, liquid culturing, pipetting, coughing, sneezing |
| Equipment | |
| Exposed body | skin, eyes, mucous membranes |
| Notes | |

| Laboratory Handling Guidelines | | |
|--------------------------------|--|--|
| Biosafety Level | 2 - refer to Biosafety Manual; contact EH&S for a copy | |
| Training | EH&S Biosafety Training; Lab specific training | |
| Engineering controls | Use in BSL 2 required. | |
| PPE | Eye protection, gloves and lab coat | |
| Waste | Biohazard - put in red biohazard bins | |

| Agent Viability | | |
|-----------------------|---|--|
| Disinfection | 0.5% alkaline solution of glutaraldehyde; 1:50 phenolic disinfectant containing 15% 2-phenylphenol and 6.3% 4-ter-amylphenol; 10% bleach solution | |
| Survival outside host | Can survive in soil and decomposing vegatation for an undetermined period of time. | |
| Engineering controls | BSC if working with liquids; lids while working with high energy equipment | |
| PPE | Eye protection, gloves, long sleeve or lab coat | |
| Waste | Biohazard - put in red biohazard bins | |

| Exposure and Spill procedures | | |
|-------------------------------|---|--|
| Mucous membranes | flush eyes, nose, mouth/throat for 15 minutes | |
| Skin contact | Wash with soap and water for a minimum of 30 second for bare skin contact; for broken skin wash with soap and water for 15 minutes | |
| Minor (small) spills | Notify all persons present in the area. Allow aerosols to settle. While wearing protective clothing, gently cover the spill with absorbent paper towel and apply appropriate disinfectant, starting at perimeter and working towards the centre. Allow sufficient contact time before clean up. | |
| Major (large) spills | Contact EH&S immediately; after-hours contact University Police | |
| Waste | Decontaminate all wastes before disposal by incineration, chemical disinfection or steam sterilization | |

References assessment/staphylococcus-aureus.html; https://sp.ehs.cornell.edu/lab-researchsafety/bios/bars/Documents/BIO BARS Staphylococcus aureus.pdf