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.
Agent Type	Biohazard
Description	*Aspergillus niger* is a fugus belonging to the class Euascomycetes. They reproduce through spores that are present year long. This fungus is used in many industries including food and drug. The fungus resides throughout the world in both terrestrial and aquatic environment. This strain can be pathogenic in humans creating respiratory distress; especially in immunocompromised individuals. However, they are not known to be contageous through human-human interaction. ref: Aspergillus niger. Genome. NCBI; https://www.canada.ca/en/public-health/services/laboratory-biosafety-biosecurity/pathogen-safety-data-sheets-risk-assessment/aspergillus.html
Host Range	Humans; animal and plant
Exposure route	Aerosol/inahalation
Incubation period	2 days to 3 months

Laboratory Hazards	
High Energy	Centrifugation, sonication, vortexing

Sharps	
Aerosols	Shaking, liquid culturing, pipetting, coughing, sneezing
Equipment	Can adhere to laboratory equipment
Exposed body	oral and nasal respiratory tracts
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 II only
PPE	Eye protection, gloves and lab coat
Waste	Biohazard - put in red biohazard bins

Agent Viability	
Disinfection	0.5% alkaline solution of glutaraldehyde; 0.125% butyl paraban ester; 10% bleach
Survival outside host	The fugal spores can survive in soil and decomosing vegetation and are heat resistant.
Engineering controls	BSC; 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
https://sp.ehs.cornell.edu/lab-research-safety/bios/bars/Documents/BIO_BARS_Aspergillus_spp.pdf