The University of Texas at Tyler
Environmental Health and Safety
BIOLOGICAL AGENT REFERENCE SHEET

Characteristics	
Risk Group	1- Agents that are not associated with disease in healthy adults.
Agent Type	Biohazard
Description	Bacteria belonging to the *Micrococcus* group are gram-positive aerobic cocci. They are common inhabitants of soil, water, dairy products, skin, mucosa, and oropharynx. They are opportunistic pathogens for the immunocompromised. They can live for long periods of time and has been isolated from inclusions in amber. They are associated with various infections, including bacteremia, and peritoneal dialysis peritonitis. Infections are associated with ventricular shunts and central venous catheters; and have also been isolated from blood and surgical specifmens in some patients with coronary and infection conditions. M. luteus has been reported as the causative agent in cases of intracranial abscesses, pneumonia, septic arthritis, endocarditis, and meningitis. They are susceptible to most antibiotics. - ref: Pseudomonas aeruginosa. Genome. NCBI.
Host Range	Humans, animals, marine animals
Exposure route	Aerosol/inahalation, direct contact, parenteral inoculation, injestion
Incubation period	Unknown

Laboratory Hazards	
High Energy	Centrifugation, sonication, vortexing
Sharps	Needles, broken glass

Aerosols	Shaking, liquid culturing, pipetting
Equipment	Easily adhere to and stay on unsanitary equipment
Exposed body	Skin, eyes, mucous membranes
Notes	No cases of laboratory-aquired infections have been reported to date.

Laboratory Handling Guidelines	
Biosafety Level	1 - refer to Biosafety Manual; contact EH&S for a copy
Training	EH&S Biosafety Training; Lab specific training
Engineering controls	BSC if working with liquids; benchtop
PPE	Eye protection, gloves and lab coat
Waste	Biohazard - put in red biohazard bins

Agent Viability	
Disinfection	1% bleach, 70% ethanol and iodines (0.075g/L)
Survival outside host	Micrococci are resistant to drying and moderate temperature changes, being able to live on human skin for up to one year. They do not survive well in natural soil.
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	Biohazard - put in red biohazard bins

References
Micococcus spp. https://www.canada.ca/en/public-health/services/laboratory-biosafety-biosecurity/pathogen-safety-data-sheets-risk-assessment/micrococcus.html

EH&S. Cornell University. https://sp.ehs.cornell.edu/lab-research-safety/bios/bars/Documents/BIO_BARS_Pseudomonas_aeruginosa.pdf