



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

Characteristics	
Risk Group	1 - Agents that are not associated with human disease.
Agent Type	Biohazard
Description	<p>Klebsiella aerogenes, also known as Enterobacter aerogenes, are Gram-negative, rod-shaped facultative anaerobe. They are part of the normal gut flora but can be an opportunistic pathogen. They are resistant to older antimicrobial agents, and more recently carbapenems, and can develop resistance to new ones.</p> <p>ref: Klebsiella. CDC; Clinical Microbiology Reviews. 1997;</p>
Host Range	Animals and plants
Exposure route	Fecal to oral, mucous membranes, inhalation or contact
Incubation period	unknown

Laboratory Hazards	
High Energy	Centrifugation, sonication, vortexing

Sharps	Needles, broken glass
Aerosols	Shaking, liquid culturing, pipetting, coughing, sneezing
Equipment	Easily adhere to and stay on unsanitary equipment
Exposed body	skin, eyes, mucous membranes
Notes	Wash hands after handling

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	suggested use in biosafety cabinet
PPE	Eye protection, gloves and lab coat
Waste	Biohazard - put in red biohazard bins

Agent Viability

Disinfection	10% bleach, 70% ethanol
Survival outside host	This bacterium can survive natural soil conditions with minimal water.
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.

References

<https://www.canada.ca/en/public-health/services/laboratory-biosafety-biosecurity/pathogen-safety-data-sheets-risk-assessment/enterobacter.html>

