

**RADIOCHEMISTRY TECHNICIAN
JOB PERFORMANCE MEASURE****TASK CODE:** TRC-F04**TASK:** Prepare a Resin Column**NAME:** _____ **SSN:** _____

REFERENCES:

1. WP 12-RL1012, Elemental Separation - Transuranic Products
2. CF-4.08, Sample Preparation Techniques
3. WP 12-RL1400, Radiochemistry Laboratory Waste Management

TERMINAL OBJECTIVE:

Given the needed materials, prepare a resin column per WP 12-RL1012.

CONSEQUENCES OF INADEQUATE PERFORMANCE:

Improper analysis results

HAZARDS (PERSONNEL/EQUIPMENT STATUS):

None

PRE-REQUISITE TRAINING/ TASK COMPLETION:

1. CF 4.00 Series
2. TRC-A04, Maintain Radiochemistry Laboratory Logbook
3. TRC-A06, Maintain Radiochemistry Laboratory Equipment

TOOLS/EQUIPMENT (MATERIALS REQUIRED):

- | | |
|-----------------|----------|
| 1. Resin column | 3. Resin |
| 2. Glass wool | |

Instructions to Trainee: You shall acquire the necessary references and equipment, and complete all required documentation. Knowledge requirements shall be completed with 80% or greater accuracy. Critical step performance shall be completed with 100% accuracy.

Instructions to JPM Evaluator: The trainee is to perform the terminal objective, without assistance, on the job site. Provide clarification of requirements if requested by the trainee. You are encouraged to ask relevant questions to verify trainee understanding. If the trainee fails this JPM, clearly document the reason for failure and forward to the trainee's manager. Successful completion of this JPM shall be recorded on the trainee's qualification card.

KNOWLEDGE REQUIREMENTS:

Reference	Knowledge Requirement	Pass/Fail
1	State when a resin column is required as part of the radiochemistry process.	
1	Discuss the various types of resin available for use.	
2	Describe how an anion and a cation resin bead exchanges.	
2	Define the term distribution coefficient	
2	Describe how the distribution coefficient affects the outcome of the supernate.	
3	State how resin is to be disposed of after it has been used.	
1	State the PPE requirements while handling resin.	
1	Discuss how resin columns are conditioned.	

PERFORMANCE REQUIREMENTS:

Reference	Performance Requirement	Pass/Fail
1	Don the required PPE.#	
1	Select the required resin.#	
1	Prepare an anion resin column.#	
1	Prepare a cation resin column.#	
3	Dispose of used resin in which a tracer has been added.#	
3	Dispose of used resin in which a tracer has not been added.#	

indicates a critical step

FINAL EVALUATION:

PASS

FAIL

COMMENTS:

EVALUATOR SIGNATURE:

DATE:_____

TRAINEE SIGNATURE:

DATE:_____

MANAGER SIGNATURE:

DATE:_____