

RISK ASSESSMENT TOOL for LABORATORY PROCEDURES

PROCEDURE IDENTIFICATION:

List chemicals used. Attach MSDS and any written procedures.

Chemical Amount(s)	Micro < 0.5 L , 0.1 g = 1 pt	0.5 , 0.1g	Normal 2 L, 2g	Large > 2 L , 2g
	1	2	3	4
Hazard Recognition	None	Routine		Extreme
USE HIGHEST SCORE ONLY				
Flammable	0	1	2	3
Corrosive	0	1	2	3
Toxic	0	1	2	3
Cryogenic	0	1	2	3
Process Conditions	N/A	Sub-ambient (P < 1 atm; T < 10°C)	Ambient (P = 1 atm; T > 10 & < 40°C)	Extreme
	0	3	1	2
Explosive Hazard	No	Yes		
	0	0	5	
Radiation Hazard	Minimal		Normal	High
	0	1	2	3
Other Hazard: Specify & Score	Minimal		Normal	High
	0	1	2	3
Special Hazards:	Inhalation Toxicity	0	5	Reactive
		0	5	0
Procedure	Detailed & Written &/or Familiarity	Routine		Under Development
	0	1	2	3
Personnel Preparedness & Training	Fully Trained, Prepared & Experienced	Routine & Trained		Untrained or Unfamiliar
	0	2	4	5
Ventilation Needed	Hood Used	General Lab Only		Not Used
	0	3	4	5
Shielding Needed (NA=0)	Used			Not Used
	0			5
Equipment Maintenance	Regularly Performed & Documented			Never Performed
	0	1	2	3

Initial Score: _____

RECOMMENDED ACTIONS BASED ON SCORE		
LOW	< 15	Procedure can be performed with routine precautions.
MODERATE	15 - 25	Procedure can be performed with attention given to specific hazards. Supervision is recommended.
HIGH	26 - 30	Procedure may be performed if necessary. High level attention must be given to all hazards. High level, continuous supervision is mandatory.
EXTREME	> 30	Procedure must be revised to lower the risk.

If score is > 25, risk reduction actions should be identified and implemented.

INSTRUCTIONS

Complete the LABRAT as part of the the procedure review. Scoring is based on a 0 - 5 scale, with 0 being "NOT APPLICABLE" and 5 being "Extreme" Your can assign any score to a specific box applicable, even if the score vale is not shown on the RAT. After scoring, interpret the score using the guidelines in the top of the right column. The PI can increase decrease the assessment, based on the situation.

List Chemicals Used

Chemical	Volume or Weight

ADVANCED CHEMICAL SAFETY **RISK ASSESSMENT TOOL** LABORATORY PROCEDURE

Date: _____

Lab Location: _____

Type of Work: DEVELOPMENTAL ROUTINE

SEQUENCE of STEPS & ACTIONS	HAZARDS ASSOCIATED w/ STEP or ACTION	RECOMMENDED CONTROLS or PROCEDURES

JOB CONTROLS

Check items which apply to job. All checked items must be addressed in the Work Plan.

- “ MSDS
- “ Fume Hood
- “ Shielding
- “ Spill Containment
- “ Fire Suppression Equipment
- “ Grounding & Bonding
- “ Hand Protection Required
- “ Eye Protection
- “ Respiratory Protection
- “ Lab Coat
- “ Gloves
- “ Respiratory Protection: SCBA or APR
- “ Lifting
- “ Special PPE
- “ Heat Protection
- “ Cold Protection
- “ Radiant Energy Protection
- “ Electrical Hazards

List All Assigned:

JOB HAZARDS

- “ Exposure to Public
- “ Fire Hazards
- “ Toxic Chemical Hazards
- “ Health Hazards
- “ Pressure Hazards
- “ Pressure Relief Valve; Rupture Disks
- “ Static Electricity Hazards
- “ Other (list)

EMERGENCY RESPONSE

List Conditions used, particularly temperature and pressure.

Alarm Method
Evacuation Meeting Point
Local EMS: 911 or _____
Local FD 911 or _____
Local PD 911 or _____
Sewer Authority:
Air Quality:
Environmental Services:
Client Contact: _____
phone: _____

List all Monitoring Equipment Needed

ENVIRONMENTAL ISSUES

- “ Releases to air
 - “ Releases to land
 - “ Releases to water
 - “ H/W Generated
- N/A = Not Applicable*