

SAFE WORK PROCEDURE

Diluting Acid (HCL, Nitric, Sulfuric, Acetic)

Page 1 of 2

LOCATION	WRITTEN BY:	APPROVED BY:	DATE CREATED	LAST REVISION
Schools in PTSD	Lorie Carriere	School Principal S&H Committee	January 26, 2012	New

PERSONAL PROTECTION EQUIPMENT (PPE)					
	Safety goggles / face shield must be worn at all times in work areas.	0	Long and loose hair must be tied back		
	Appropriate footwear must be worn. Shoe must be fully enclosed. No open toed shoes.	THE STATE OF THE S	Lab coat or apron (chemical resistant)		
0	Rings and jewelry (long necklaces / bracelets, etc.) must not be worn.	(Eller)	Chemical resistant disposable gloves are required.		

HAZARDS PRESENT	ADDITIONAL REQUIREMENTS
✓ Chemical spill✓ Chemical burns	✓ PPE as per MSDS✓ WHMIS training
 ✓ Corrosive substances ✓ Generates heat when in contact with water ✓ May splatter with water 	✓ Emergency spill kit, sand , kitty, litter✓ Chemical handling
✓ Strong fumes	

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PRE JOB STEPS:

- Supervisors must ensure that employees required to work with chemicals are in possession of or have access to the material data sheet prior to being required to work with the chemical.
- Supervisors must ensure that employees required to work with chemicals are provided with the appropriate PPE i.e. chemical gloves goggles, masks, etc.
- Supervisors must ensure that employees are provided with the proper PPE and are trained in its safe use, inspection, replacement and are encouraged to use the appropriate PPE at all times.
- Workers are to inspect the condition of their PPE prior to use and to store their PPE safely when not in use and to immediately replace their PPE as soon as it's damaged or lost.



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Page 2 of 2

- Employees must ensure they do not mix chemicals unless they have read & understood the data which will inform them if chemicals can be mixed and if so how to carry out the operation safely
- Employees shall not decant and store chemicals in unmarked/unsuitable containers
- Supervisors must ensure that employees have a procedure in place for dealing with a chemical spillage.
- Supervisors must ensure that once a spillage is contained and cleaned up, that there is a procedure in place for the safe disposal of the contents /material ,chemical or other contaminates

Ensure that a workplace label has been placed on the decanted container into which the chemical will be decanted prior to starting the decanting process.

Procedure:

- 1. Turn on the fume hood 5 minutes prior to starting work.
- 2. Don all personal protective equipment prior to starting work.
- 3. Place all equipment and materials into the hood.
- 4. In fume hood measure out 2/3 of distilled water into volumetric flask.
- 5. Using a graduated cylinder, measure amount of acid needed.
- 6. Slowly pour acid into water.
- 7. Add water to fill up to measuring line.
- 8. Pour solution into storage bottle.
- 9. Place identification label onto storage bottle including the strength of the new solution.

REGULATORY REQUIREMENTS

- WS&H Act W210, Section 4, 5, 7, 7.1
- Mb. Workplace Safety & Health Regulations 217/2010,
 - ✓ 2.1 Safe Work Procedures
 - √ 6.1 Personal Protective Equipment
 - √ 8.0 Musculoskeletal Injuries
 - ✓ 35.0 WHMIS
 - √ 36.0 Chemical Biological Substances
- Safe Work Bulletin #164 PPE
- Safe Work Bulletin #246 Safe Lifting
- Safe Work Bulletin #104 Emergency Eye Wash