

PCL-CH- 002 Rev. 2 Checklist
Piranha Etch of substrates
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Users (two names): _____
Fumehood or Center Wetbench : _____
Day/Date: _____
Time: _____

4.1 Preparation

Get Technician or Lab Manager approval to use Piranha etch	
Copy of procedure PCL-PR-002 on-hand	
Copy of MSDS for hydrogen pyroxide on-hand	
Copy of MSDS for sulphuric acid on-hand	
Caution other Users in Cleanroom that piranha is being used.	

4.2 Personal Protective Equipment

Check blue nitrile gloves for pinholes, chemical residue	
Check face shield for damage, dried chemical residue	
Check apron for holes, damage, chemicals residue	
Check thick nitrile gloves for holes and chemicals residue	

4.3 Supplies

Adequate supply of wipes available	
Glass labware clean and dry	
Have garbage can nearby with white garbage bag inserted	
stainless steel tweezers available	
waste (glass) bottle on hand	
large glass tray (12 in by 15 in) clean and dry	

4.4 General Procedure

Put on thick chemical apron	
Put on face shield	
Put on thick nitrile gloves	
If possible, carry out operations involving piranha with one gloved hand. The other gloved hand may then be free for turning on valves in hood area. If gloves become wet or otherwise come into contact with piranha, do not turn on any valves or switches until the gloves are rinsed well with water.	
If there is any doubt about skin contact with piranha, flood area for several minutes (especially under fingernails). Piranha causes severe burns to skin and eyes that are not immediately painful or visible	
Wash or rinse your hands following the performance of an etch or when moisture that might even remotely contain piranha is contacted in the etch area. If piranha is contacted, immediately quench with water	

Use the large glass tray as a fume hood liner for the piranha work area	
Keep plastics well away from piranha work area	
Keep squeeze bottles of acetone, alcohol, methanol, organics well away from the piranha work area.	
Add hydrogen pyroxide to sulphuric acid slowly. Heat is generated and bubbling will occur.	
Keep a small stream of tap water (not DI water) running if a quick rinse of gloves is needed	
Work with the utmost caution	

4.5 Cleanup

Make sure outside of hydrogen pyroxide stock bottle is clean, dry, acid free	
Make sure outside of sulphuric acid stock bottle is clean, dry, acid free	
hydrogen pyroxide stock bottle - put back into Acid storage cabinet	
sulphuric acid stock bottle - put back into Acid storage cabinet	
Wait for piranha solution to cool	
Post a sign " Danger Hot Piranha solution. " Name : Date: Time :	
When piranha is cool, wear apron, thick gloves, face shield and transfer waste piranha to glass bottle	
All labware has been rinsed well with water	
All counter surfaces wiped with water and wiped dry	
Chemical apron has been wiped with water and hung to dry	
Thick gloves has been wiped with water and hung to dry	
All thick chemicals gloves rinsed with water and hung to dry	
Used wipes, used swabs and used disposable gloves have been doubled bagged	
Waste piranha bottle is labeled with name, date and contents.	
Do NOT CAP tight (gas build up).	
Label bottle "Danger Piranha waste, Keep away from organics. "	
Rinse and clean the large glass tray	
Waste bottle have been placed in Acid Storage cabinet	

5.0 Checklist Filing

File this completed checklist in the pass-through for pickup by Technician	
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