

## DARKROOM CHEAT SHEET

### SAFETY NOTES

- Make noise when you enter/exit the curtained doorways (ie: whistle, “coming through”, etc).
- Never transport chemicals in and out of the darkroom in trays. Always pour into jugs.
- Gloves and masks are available in the box under the coat rack. Aprons are hanging behind the door in the film changing room.
- For major chemical spills, a spill kit is located under the coat rack.

### Chemical storage rules:

- Always write your **NAME** and **DATE** on any chemicals stored in the darkroom.
- If using bottles to store mixed chemistry, always write the **NAME OF THE CHEMICAL** on the bottle. Do not reuse beverage bottles or food containers to store chemistry.

### FILM DEVELOPMENT

1. Check Massive Dev Chart for development times. ([digitaltruth.com/devchart](http://digitaltruth.com/devchart) or ios/android app).
2. Determine mixing total for your tank (Paterson tanks are marked on the bottom).
3. Mix chemistry based on dilution ratios found on each chemical's bottle label.
4. Follow these steps:

#### DEVELOPER

**Time:** see Massive Dev Chart or product label.

Note: accurate water temp is critical; 20°C is standard.

**Agitate:** Agitate constantly for first 30 seconds. Then, agitate for 10 seconds every 1 minute.

**Disposal:** Pour down drain followed by equal parts tap water.

#### STOP BATH

**Time:** 1 min

**Agitation:** Agitate constantly for first 30 sec

**Disposal:** Pour into disposal unit next to sink.

#### FIXER

**Time:** 5 min

**Agitation:** Agitate constantly for first 30 sec. Then, agitate for 10 seconds every 1 minute.

**Disposal:** Pour into disposal unit next to sink.

#### WASH

**Time:** Use the water-saving ILFORD archival washing method:

1. Fill the tank with water at the processing temperature. Invert 5 times, drain.
2. Fill, invert 10 times, drain.
3. Fill, invert 20 times, drain.

#### PHOTO FLO

**Dilute:** 2.5mL to 500mL water ( $\frac{1}{4}$  to  $\frac{1}{2}$  capful into full tank of water).

**Time:** Dip reel into tank for 30 sec.

#### DRY

Hang in film drying cabinet, close door, set timer for 20 mi

## B&W PRINTING

### 1. Mix chemistry:

See product labels for dilution instructions. Use water at 20°C / 68°F.

**Developer** (Ilford Multigrade - 1:9)

**Stop Bath** (Kodak Indicator Stop Bath - 1:63)

**Fixer** (Ilford Rapid Fixer - 1:9)

### 2. Adjust enlarger:

- Check lens length, condenser position, and contrast filter. Usually start printing with a 2.5 filter.
- Load negative into carrier.
- Open lens aperture to widest setting.
- Raise or lower enlarger head to enlarge your image to desired size. Always unlock/lock the locking knob before turning crank.
- Adjust focus using bellows lever, then knob. Use a grain enlarger to focus your image.
- Adjust easel blades.

### 3. Make a test strip:

- Place a strip of photo paper on your easel, ideally choosing an area in your image that shows highlights, mid tones and shadows.
  - Set lens to desired aperture (we recommend f/11 to start).
  - Make a series of four exposures at set time intervals, ie: for f/11 try 5 second intervals. Start by exposing the entire strip for the *minimum* exposure (ie: 5 sec). Then, cover  $\frac{3}{4}$  of the strip with a piece of matboard, and expose again, then repeat at  $\frac{1}{2}$  and  $\frac{1}{4}$ . (4 exposures in total).
- Develop the test strip (follow development instructions below).**
  - Use the test printing process to determine your final print exposure.**
  - Refine with another test strip or develop a final print.**



## PAPER DEVELOPMENT

Agitate (gently rock) the trays throughout each bath. Let prints drip off thoroughly before moving to the next chemical.

### DEVELOPER

**RC:** 1 min

**Fibre:** 1.5 - 2 min

### STOP BATH

**RC and Fibre:** 30 seconds

### FIXER

**RC:** 1 min.

**Fibre:** 1.5 min

### WASH

**RC:** 5 min minimum in tray of running water.

**Fibre:** 60 min minimum. Use archival print washers. Can also use Hypoclear to half wash times.

## ALTERNATIVE PROCESS GUIDELINES

- Note the process you are doing and sink space in your booking.
- Use trays marked "Alt Process", in the large tray under the teaching darkroom sink.
- If using any chemicals other than those used in traditional B/W printing, consult with Darren about using and storing them. Provide MSDS for the safety binder.