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## PAPER RUSTING

Creating a rusted effect on paper or fabric is an easy and creative process, but it does involve handling potentially hazardous chemicals. Always wear chemical-resistant gloves when working with caustic soda, and follow the safety guidelines below. This handout will walk you through the materials needed, preparation steps and techniques for experimenting with different dips to achieve a variety of rusted effects.

### YOU WILL NEED

**Gloves** - chemical resistant gloves for safe handling of the caustic soda/water solution

**Paper** - Plain paper, colored paper, printed paper, even cyanotype and/or eco-printed paper - anything sturdy enough to withstand being dipped in water without disintegrating

**Water**

**Caustic Soda** Crystals

Approx 2 tbspn per 2 litres water

**Iron Sulphate** Soluble crystals

Approx 100g per 2 litres water

**Tea bags** - cheap, home brand tea bags

Approx 30 bags per 2 litres water

**Indian Ink**

Approx 2 tbspn per 2 litres water

**4x plastic tubs**

### IMPORTANT NOTES FOR SAFETY & PROCESS

**The rusted effect comes from Caustic Soda and Iron Sulphate** - To achieve a rusted look, you must dip your paper in both the Caustic Soda (CS) tub and the Iron Sulphate (IS) tub at some point.

**Tea and ink tubs add extra interest** - Dipping paper into tea and/or ink adds different tones and textures.

**Mix and match** - You do not have to use all the tubs for every piece. Experiment with different combinations and sequences. However, remember that if you skip either the CS or IS tub, you will not get the rusted effect.

### PREPARATION

#### **Tub 1 - Caustic Soda** (T1-CS)

- Fill the tub with 2 litres of cold tap water.
- Slowly add 2 tablespoons of caustic soda crystals into the water.
- Stir (or agitate) gently to dissolve the crystals. I use a stick from the garden to stir my solution.
- Never add water to the crystals—always add crystals to water.

#### **Tub 2 - Iron Sulphate** (T2-IS)

- Fill the tub with 2 litres of warm water.
- Add 100 g of iron sulphate crystals to the water.
- Stir (or agitate) gently to dissolve the crystals.

#### **Tub 3 - Strong tannin / tea** (T3-tea)

- Place 30 tea bags in the tub and add 1 litre of boiling water.
- Allow it to brew for 15–30 minutes to create a strong solution.
- Add another liter of cold tap water to bring the total to 2 litres.

#### **Tub 4 - Indian Ink** T4-(ink)

- Add 2 tablespoons of Indian ink to 2 litres of tap water.
- Stir (or agitate) to mix thoroughly.
- Adjust the amount of ink to achieve your desired intensity.



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### PROCESS

#### 1. Glove up and get ready

- Put on your chemical-resistant gloves before you start.
- Have your tubs prepared and positioned in the order you wish to dip.

#### 2. Dip and experiment

- Take one piece of paper and dip it into your chosen tub.
- Dip again into another tub - or more tubs - in any order you like.
- Hang or lay your paper on a towel to dry before further dipping, or re-dip immediately for different effects.

#### 3. Remember the basics

- To get a rusted look: You must dip in both T1-CS (Caustic Soda) and T2-IS (Iron Sulphate) at some point.
- Try Different Orders:
  - T1-CS > T2-IS (observe the outcome)
  - T2-IS > T1-CS (compare how this differs)
  - T3-Tea > T2-IS > T1-CS
  - T4-Ink > T3-Tea > T1-CS > T2-IS
- Each order yields a unique result. Don't be afraid to try new sequences or skip a tub (but not both CS and IS if you want rust).

### TIPS & VARIATIONS

**Strength of solutions:** Adjust the ratios of caustic soda, iron sulphate, ink, and tea in their tubs. A stronger solution gives bolder results; a weaker solution gives more subtle tones.

**Salt sprinkles:** After dipping in ink, sprinkle salt on the wet paper, let it dry, then brush the salt off for interesting textures.

**Re-dip:** Let papers dry and then dip again for layered effects.

#### Additional chemicals:

- Condy's Crystals (Potassium Permanganate) or Oxidizing Patina can be sprinkled onto the paper after dipping.
- Strong Green Tea can be used instead of black tea to see how different tannin levels alter the color.

### DISPOSAL OF CHEMICALS

**Always check your local council regulations** for proper disposal of chemicals in your area. Below is how some people handle it:

- **Caustic Soda solution:** In some places, it is acceptable to pour the used solution down the drain, as it can be used as a drain cleaner. If you have a septic system, pour onto weeds (as caustic soda can help kill them).
- **Iron Sulphate solution:** I pour unused iron sulphate solution onto weed-prone areas in my gardens or on the gravel on my driveway.