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Theourea Dioxide Information Sheet

General Information: Use to remove colour from natural fibres dyed with Fibre Reactive dyes. Yarn, fabric or garments may be stripped. Results are best if used with simmering water. With hot tap water, Thiourea Dioxide is an excellent colour reducer for re-dyeing the same or similar colour at the same or stronger intensity. It may also be added to print pastes for discharge printing and is used for bleaching natural wools to obtain clear colours in subsequent dyeing. Thiourea Dioxide performs best at an alkaline PH of 10.5. It has an indefinite shelf life in dry form. Solutions may be kept 5-7days without the addition of Sodium Carbonate. Store in a closed container.

Safety: Wear a dust/mist disposable mask to handle powder, wear rubber gloves for liquid form. Although it does not emit noxious or poisonous fumes, we do recommend good ventilation. Never use in combination with bleach or detergents containing chlorine bleach as toxic fumes may be produced. Never use with cast iron, aluminum or copper pots or utensils.

Directions:

FOR 1LB OF DRY FIBRE

Cellulose fibres: Cotton, Linen, Rayon, Jute, Sisal.

Protein fibres: Silk, Wool.

Stripping Colour from Cellulose Fibres

Step 1 – Use 2 gal. (8L) hot water (120 oF) in an enamel or stainless steel container.

Step 2 – Add 2.5 tsp. (10gm) Thiourea Dioxide, stir to dissolve.

Step 3 – Add 1Tbsp (15gm) Sodium Carbonate, stir to dissolve.

Step 4 – Add 1 tsp G&S TNA soap.

Step 5 – Add 1LB of dry fibre, stir 1 minute.

Step 6 – Heat rapidly to 200 oF – 212 oF, stir frequently for 20 minutes. The more stirring, the better the result. If a slight odor of ammonia is detected, the Thiourea Dioxide is used up. To remove more colour, rinse fibre and repeat stripping procedure.

Step 7 – Rinse well in warm water.

Step 8 – Add 1/4 cup of white vinegar to the final rinse to neutralize the alkaline PH.

Stripping Colour from Protein Fibres

Follow the directions for Cellulose Fibers but:

1. Reduce the amount of Sodium Carbonate to 1 tsp. per 1 LB of dry fibre.
2. Heat to 190 oF for silk or 100 oF for wool.
3. Rinse in warm water and 1/4 cup of white vinegar immediately after stripping, continue to rinse well.

Reducing Colour by Hand

FOR 1LB OF CELLULOSE FIBRE

Step 1 – Use 2 gal. (8L) hottest tap water in a plastic, enamel or stainless steel container or sink.

Step 2 – Add 2.5 tsp (10gm) Thiourea Dioxide, stir to dissolve.

Step 3 – Add 1 Tbsp (15gm) Sodium Carbonate, stir to dissolve.

Step 4 – Add 1 tsp G&S TNA soap.

Step 5 – Add fibre and stir frequently for 30 minutes.

Step 6 – Rinse well in warm water.

Step 7 – Add 1/4 cup white vinegar to the final rinse.



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Reducing Colour in a Washing Machine

FOR 8LB LOAD OF CELLULOSE FIBRE

Step 1 – Use hottest tap water, fill machine.

Step 2 – Add 2 Tbsp Thiourea Dioxide.

Step 3 – Add 1/2 cup Sodium Carbonate.

Step 4 – Add 3 tsp G&S TNA soap and agitate machine to dissolve.

Step 5 – Add fibre and agitate machine on wash cycle for 30 min, resetting machine so it will not empty.

Step 6 – Add 3/4 cup of white vinegar to the final rinse.

Discharge Printing Cellulose Fabrics – for 1 cup of discharge paste.

Step 1 – Use a non-reactive container.

Step 2 – Add 1/4 tsp Thiourea Dioxide.

Step 3 – Add 1/2 tsp Sodium Carbonate.

Step 4 – Add 1/4 tsp pure water softener (Sodium Hexametaphosphate.)

Step 5 – Add 1 1/2 tsp Sodium Alginate.

Step 6 – Add water to make 1 cup, stir well, leave for several hours to dissolve alginate.

Step 7 – Apply paste to the fabric, let dry.

Step 8 – Steam fix for 30 minutes.

Step 9 – Rinse well.