PRO-1 LTC "LEATHER TANNING CONCENTRATE" GUIDE

PRO-1 Performance Chemicals (681-355-0225 / 304-880-3119) www.pro1performancechemicals.com

Submersible Tan Instructions – Tannery Quality System

"Synthetic Replacement Tanning Agent for Users of Submersible Tans"

[% x weight of shaved, wet drained skin = weight of product …example: 6% of a 5 lb. cape is .06 x 5 lb. = .3 lb. of product]

Note: If using paddle vats, paddle 5 minutes every 2 hours during the tanning process.

1. Pickle skin 3 days minimum, shave, & re-pickle 12 hours minimum {degrease greasy skins after shaving)
   Option: add 1-2 fl. oz. LTC / 4-5 lb. skin for penetration, softening, whitening (2-4% drained skin weight)…or up to
   2% "Aluminum Sulfate " (iron-free) for Tannery Operations

2. Remove from pickle / drain well – weigh skin(s)

3. Tanning Bath: **PRO-1 Leather Tanning Concentrate**: 48 hour Process

   - 2 quarts lukewarm (85-90 deg. F) temp. water / lb. drained skin
     Note: avg. deer cape 5lbs. – use 2 ½ gallons water (enough water to submerge skin)

   - ½ lb. salt / gallon water

   - stir in ¾-1 fl. oz. **LTC** / lb. skin = 6-8% drained skin weight
     (per preference: up to 2 fl. oz. / lb. of skin or 15% is acceptable…Reptiles / Flat Skins)
     Option: add 2-3% Aluminum Sulfate for tannery operations (Combination: 6-8% LTC + 2-3%
     Aluminum Sulfate)…add Aluminum Sulfate first (pre-mixed w/ warm water) followed by LTC 2 hours later…
     LTC 24 hours later if tanning 2 days before fatliquoring

   - add skin – stir well first hour to wet out all folds / expose all skin to the tanning solution…
     agitate every other hour during the day, leave overnight…hair-up / skin-down

   - after 24 hours, slowly adjust the bath pH to 3.5 (bump 3x - not all @ once…1 hour between)
     Note: To raise pH – remove skin – add 1-2 oz. baking soda by weight / 5 gallons bath (stir well)…re-add skin…
        check solution pH & bump up incrementally between existing pH & target pH of 3.5 (example: beginning
        pH 1.8: go to 2.4ish – 3.0ish – then 3.5…the goal is to get the solution to settle to the intended pH – you
        may have to bump a little higher & the pH will fall back to the desired pH – if you go way too far, add dribble
        of acid to correct…never add baking soda concentrated into the bath (remove skin to avoid pH shock)…
        bump until you achieve pH 3.5 - check 10-15 minutes later to ensure the pH stays @ 3.5 to proceed

   - add **TanLiquor** oil mixture: 2 fl. oz. / lb. skin or 8-10% drained skin weight…
     prepare mixture by first pre-mixing the TanLiquor w/ 3x the oil amount of hot tap water…
     stir the "water into the oil"…then stir this mixture into the tanning solution
     (example: if using 8 fl. oz. TanLiquor, pre-mix w/ 24 fl. oz. water)
     Option: leave the TanLiquor out of the tanning bath & swab on after Step #4 "post tan Horse-Up"
     (if so, after tanning - elevate pH to 4.0-4.2 / leave 2 hours to overnight – remove, rinse, horse-up, oil)

   - agitate every other hour rest of day, leave overnight…hair-up / skin-down
     Note: 2 days minimum for static tanning – but, the longer the better: 5-6 days heavy skins

4. Remove skin from tan, rinse in cold water & "Horse-Up" 24 hours: lay over a "Leather Horse" for
   even / gentle draining - "hair-out" for CHEMICALS TO FINISH PROCESSING…can "pile up" on
   one another – hair to hair, skin to skin, etc. – allow for drainage…DO NOT HANG VERTICAL
   ("Leather Horse": A-Frame structure that allows even draining from the skin back through the belly)

5. Skin is ready to mount or bag & freeze (no additional wash / rinse / tumble needed)

   Note: Dry / Soft Tans: after "Step 4 Horse-Up" - oil skin w/ warmed TanLiquor…fold at room
      temp. to sweat 18-24 hours – hair-side out (no skin exposed)…allow for drainage…skin
      is ready to finish (it is not necessary to utilize TanLiquor in the tan for Dry Tans, but swab
      instead after tanning…or both for added softness)
      Option: mix 1-2 parts mineral spirits into 8-9 parts TanLiquor for swabbing – warm to apply

NOTE: pH meters provide EXACT readings for pH adjustments (see web site for where to buy)