# Rittel's EZ-100 TANNING INSTRUCTIONS

**RITTEL'S EZ-2000 Kit** – Using EZ-100 – the newest and highest quality tanning agent available – and only from RITTEL'S and our authorized Distributors! This is a powdered Syntan Tanning agent that eliminates environmental and personal handling problems. It costs less – and you use less – to tan more! EZ-100 is your best environmental choice! It contains no metallic components. EZ-100 is a Sulphonic Acid agent synthetically manufactured.

EZ-100 tanned skins and capes are white leathered, soft, durable, and stretchy! They look prime and clean! There is negligible shrinkage. EZ-100 tanned skins and capes are an excellent choice for Taxidermy purposes or garment use. For rug work – they are the best choice! Rugs tanned with EZ-100 are washable and durable! EZ-100 has no shelf life – they do not fall apart with age!

### **Basic Preparation**

Preparing a skin or cape for tanning requires the same basic techniques, regardless of which tanning agent you may want to use for the actual tanning process. To simplify the Preparation process – I like to use 5 basic steps.

- **1. Skinning** Skin the animal. If it is still warm, open the skin or cape and hang it to allow it to cool for several hours.
- **2. Fleshing** Flesh away all the meat, fat and membrane next to the flesh. For garment or trophy wall skins light thin skins can now be stretched and air dried, and then relaxed later for tanning. For Taxidermy and general work I recommend salting.
- **3. Salting** Apply a heavy layer of Salt to the flesh side of the skin or cape. Fold it flesh side to flesh side, and hair to hair, and then place it on an inclined surface to drain for 1-2 days.
- **4. Drying** When drained shake out the excess Salt and reapply another layer of clean Salt. Again, fold it, and allow the Salt to penetrate the skin for 24 hours and then shake out the loose Salt, Spread the cape or skin out, or hang it, and allow it to dry salted, then store it, relax, and tan it later. Salting and drying is important it promotes rapid drying, leaches out the unwanted liquids, and sets the fur or hair tight. Don't avoid it. You can use lodized or Non-lodized Salt. Non-lodized is typically cheaper in larger quantities, and therefore preferred.
- **5. Relaxing** When you are ready to tan your skin or cape place it in a strong Brine solution, or use RITTEL'S ULTRA-SOFT (US-609) Relaxing agent, and soak them for 10-24 hours, or until they completely relax and become soft again. To mix a Brine solution use 2 Lbs. Of Salt to every 1 Gallon of cool Water used to completely submerge the skins and capes.

Salt Dried skins or capes usually relax easily – but other types of skins, usually air dried, African flint dried, and air dried greasy skins, do not relax easily. For these types of skins, I highly recommend using a RITTEL'S ULTRA-SOFT (US-609) Relaxing bath. Add 4 Tablespoons of US-609 to each gallon of Water used to completely submerge the skins. For greasy skins – use 8 Tablespoons of US-609 to each gallon of Water. Soak the skins or capes for 6-12 hours, or until they are fully relaxed. Then rinse them well, and place them directly into the Pickle bath. Always remove any Blood stains prior to Pickling.

### 6. Saftee-Acid Pickling

EZ-100 is compatible with almost all Pickling methods, including Oxalic, Formic, Citric, White Vinegar and even Alum Pickling. All of them do an excellent job, however I prefer using Saftee-Acid when you want to avoid environmental and personal handling problems.

**Saftee-Acid Pickling Solution** – Mix enough Pickling solution to completely submerge the skins or capes. For every 1 Gallon of solution needed, mix:

1 Gallon of Lukewarm Water 1/2 fl. Oz. Of Saftee-Acid 1 Lb. of Salt (1 1/2 Cupfuls = 1 Lb.)

After mixing the solution – test the Ph level. It should read below a 2.0 Ph. Usually it reads around 1.1 pH. Measure the Salt content using a Salinometer. It should read 40% or higher. Place the skins or capes into the solution, and allow them to Pickle for a minimum of 3 days. When thoroughly pickled – the skins or capes will appear translucent and milky-white colored.

# 7. Shaving/Degreasing/Washing/Rinsing

After at least 3 days in the pickle – the skins or capes can now be safely pulled, drained for 1 hour, and then thoroughly shaved on a fleshing machine. Although light furs, like Fox or Coyote can be tanned soft without shaving, heavier skins such as Deer and the thicker fleshed skins like Buffalo, Elk and Moose, definitely should be shaven. After shaving all the skins in the pickle – they should now be degreased, washed, and then thoroughly rinsed – and returned to the Pickle for at least another 24 hours or longer. ALWAYS return shaven skins to the pickle. This will allow it to penetrate areas that are now exposed. Use RITTEL'S Super Solvent (SS-618) for degreasing, and RITTEL'S Washer (RD-601) for the best results – use 1 capful of RD-601 to each 1 gallon of washing solution. Wash your skins in this solution for 10-15 minutes and rinse. If degreasing is necessary – use 2 fl. Ozs. of SS-618 to each 1 gallon of

degreasing solution. Soak your skins for 30 minutes and rinse. Always degrease Bears and other fatty skins. After preparing the skins for tanning – they can now be left safely in the Pickle for at least 2 weeks and longer – but monitor the pH, and stir the skins or capes at least every other day. The Pickle is a safe temporary preserving solution.

### 8. EZ-100 Tanning Method

Tanning agents are very sensitive. Always check the pH before placing the skins into the solution. EZ-100 tans at a pH level of 4.0 pH. Check this pH level before placing the skins into it – and also 30 minutes later. If lower than a 4.0 – add very small amounts of Baking Soda or Sodium Acetate. If higher – add small amounts of your pickle or dissolved Citric or White Vinegar acid to adjust it. When mixing your tanning solution, first add the EZ-100 and stir it until it dissolves, then add your Salt. If mixing a solution for tanning 4 capes, add all 4 capes to the solution – not one at a time over 3-4 hours or more. EZ-100 is a fast tanner, and the initial capes or skins may deplete it before the last cape or skin is placed into the solution.

**EZ-100 Tanning Formula based on Wet Drained Weight** – I prefer this method. It is an accurate way to tan. No guesswork! Very reliable! After neutralizing the skins or capes, and draining them for 1 hour – weigh them. This is their wet drained weight. Use it to calculate the amount of tanning solution needed. It is the most accurate and least wasteful method. For every 1 Lb. of wet drained weight, mix:

2 Quarts of Water 1/2 Oz. Of EZ-100 (2 level Tablespoonfuls = 1/2 Oz.) 4 Ozs. Of Salt

**EZ-100 Tanning Formula based on Water Volume** – After neutralizing the skins or capes, and draining them for 1 hour – some Tanners prefer to simply mix enough solution to completely submerge the skins or capes. This formula is based on the amount of water used. For every 1-Gallon of Water used, mix:

1 Gallon of Water 1 Oz. of EZ-100 (4 Level Tablespoonfuls = 1 Oz.) 8 Ozs. Of Salt

It is extremely important not to overcrowd the skins or capes when using the Water Volume formula. For either solution – keep the solution at a comfortable room temperature between 65-75 degrees Fahrenheit. Leave the skins or capes in the tanning solution for 16-20 hours. Almost all skins will thoroughly tan within 24 hours. NEVER OVER-TAN! After 24 hours – pull

the skins from the tanning solution. Rinse them and allow them to drain for only 20 minutes – NO LONGER! If you have a dry sawdust tumbler available – tumble the skins or capes in it for 5 minutes maximum – to remove only the surface moisture. Then briefly cage or blow away the sawdust with your air gun.

### 9. Oiling & Drying

When the skins or capes have drained for 20 minutes, lay them out flat, flesh side up. Now apply the Hot Oil/Water mixture to the flesh side using a paintbrush. For best results, use 1 Part RITTEL'S ProPlus Oil (PP-301) to 2 Parts of Hot Tap Water. Apply the Oil/Water mixture while it is still hot. The skin should be at room temperature. Apply it carefully along the edges and around holes. When oiled – fold the skin or cape, flesh to flesh, hair to hair, and lay it aside in a warm area to sweat in the oil for 4-6 hours. Maximum take-up of the Oil will take place during this sweating period.

For Taxidermy purposes – after sweating, the skin can be briefly tumbled damp dry, or toweled damp dry, and then mounted, or frozen for thawing and mounting later. To clean up any oil splash into the fur or hair, some degreasing solvent or RITTEL'S Super Solvent (SS-618) can be added to the sawdust. This will help produce a cleaner cape or skin, if a tumbling Drum is used.

If you want to dry and finish the cape or skin – after it has sweated in the Oil – open up the skin or cape and hang it to dry. Drying will depend on the thickness of the flesh. Usually it will take 1-2 days. When it is almost 95% dry – begin to work and stretch the fibers with your hands or a staking tool. Work the fibers until it is completely dry. If it dries too fast – dampen the flesh side with a sponge, put it in a plastic bag, cool or refrigerate it overnight and then hang it to dry the next day, and work it again when its almost 95% dry.

All skins can be tanned using EZ-100, however the heavily fleshed skins, because of their thickness, unless shaven, will not allow you to produce the extreme softness you may expect. In a Tannery, such skins are shaved thin for softness. Some Tanners compensate for shaving by double oiling after the first sweating period, then mounting the skins and capes, or — letting them dry and then sanding them thin after drying.

# 10. Finishing

When the flesh side is completely dry – use sandpaper or a rasping sheet to clean up the flesh side and give it that professional look! Trim away

any ragged edges, and comb or brush out the fur or hair. Your skins or capes should now be fully tanned and ready to use.

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**CAUTION** – EZ-100 is a mildly acidic tanning agent. It should not be taken internally, and care should be taken that any skin contact does not cause an allergic reaction. After handling, or contact with the Pickling or Tanning solutions, always wash your hands with soap and water. We highly recommend you wear gloves and a Rubber apron when tanning. If accidentally taken internally, induce vomiting, and call your Physician. Always store and use chemicals safely – and away from children and visitors.

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## **Disposal**

After using the Saftee Acid or EZ-100 solutions, they can safely disposed by first raising the pH level to a 6.5-7.0 pH. Use Baking Soda or Sodium Carbonate (Soda Ash) to economically raise the pH level. After neutralizing the acidity – the solutions can safely be dumped in city sewage. In rural areas, where city sewage is not available – raise the pH level, and then dump the solution in an area where its salt content will not affect plant growth.

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