POTASSIUM NITRATE

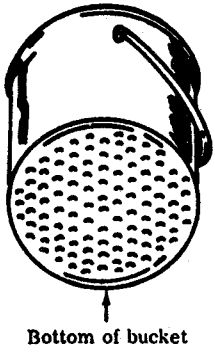
Potassium nitrate (saltpeter) can be extracted from many natural sources and can be used to make nitric acid, black powder and many pyrotechnics. The yield ranges from .1 to 10% by weight, depending on the fertility of the soil.

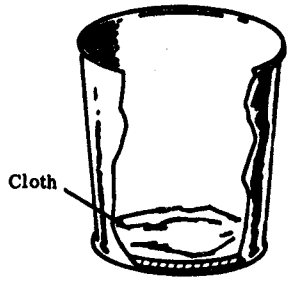
MATERIALS	SOURCE
Nitrate bearing earth or other material, about 3-1/2 gallons (13-1/2 liters)	Soil containing old decayed vegetable or animal matter Old cellars and/or farm dirt floors Earth from old burial grounds Decayed stone or mortar building foundations
Fine wood ashes, about 1/2 cup (1/8 liter)	Totally burned whitish wood ash powder Totally burned paper (black)
Bucket or similar container, about 5 gallons (19 liters) in volume (Plastic, metal, or wood)	
2 pieces of finely woven cloth, each slightly larger than bottom of bucket	
Shallow pan or dish, at least as large as bottom of bucket	
Shallow heat resistant container (ceramic, metal, etc.)	
Water - 1-3/4 gallons (6-3/4 liters)	
Awl, knife, screwdriver, or other hole producing instrument	
Alcohol about 1 gallon (4 liters) (whiskey, rubbing alcohol, etc.)	
Heat source (fire, electric heater, etc.)	
Paper	
Tape	

NOTE: Only the ratios of the amounts of ingredients are important. Thus, for twice as much potassium nitrate, double quantities used.

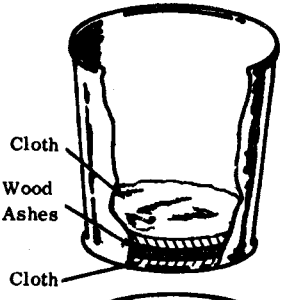
PROCEDURE:

1. Punch holes in bottom of bucket. Spread one piece of cloth over holes inside of bucket.

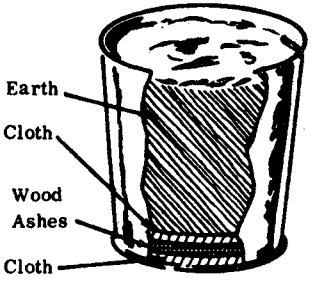




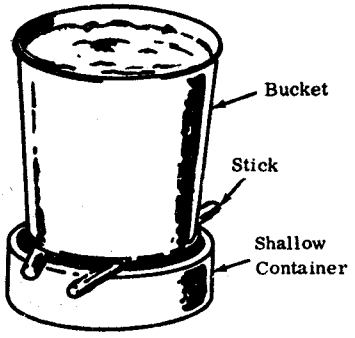
2. Place wood ashes on cloth and spread to make a layer about the thickness of the cloth. Place second piece of cloth on top of ashes.



3. Place dirt in bucket.



4. Place bucket over shallow container. Bucket may be supported on sticks if necessary.

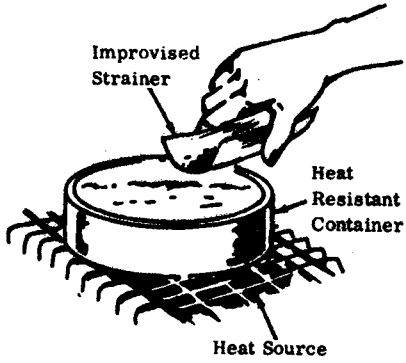


5. Boil water and pour it over earth in bucket a little at a time. Allow water to run through holes in bucket into shallow container. Be sure water goes through all of the earth. Allow drained liquid to cool and settle for 1 to 2 hours.

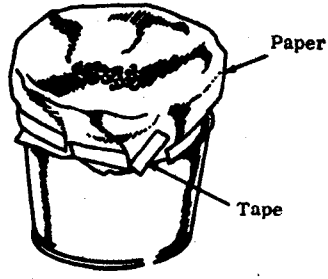
NOTE: Do not pour all of the water at once, since this may cause stoppage.

6. Carefully drain off liquid into heat resistant container. Discard any sludge remaining in bottom of the shallow container.

7. Boil mixture over hot fire for at least 2 hours. Small grains of salt will begin to appear in the solution. Scoop these out as they form, using any type of improvised strainer (paper, etc.).



8. When liquid has boiled down to approximately half its original volume, remove from fire and let sit. After half an hour add an equal volume of alcohol. When mixture is poured through paper, small white crystals will collect on top of it.



9. To purify the potassium nitrate, re-desolve the dry crystals in the smallest possible amount of boiled water. Remove any salt crystals that appear (Step 7); pour through an improvised filter made of several pieces of paper and evaporate or gently heat the concentrated solution to dryness.

10. Spread crystals on flat surface and allow to dry. The potassium nitrate crystals are now ready for use.