

1. AQUA ARDENS Common [15]

Description: Strong alcohol, the water of fire.

Appearance: Clear liquid.

Effect: Used in various alchemical concoctions. Primarily used as a flammable liquid. A strong solvent for organic materials.

Ingredients: Wine 8 parts.

Preparations: Distill good wine five times. Place the ascentate in a pelican. Put the pelican in a fermenting bed of *finus equinis*. Allow to circulate. The liquid will separate into a lower turbid layer and a sky blue liquid.

Yield: 1 part Aqua Ardens.

Notes: Some alchemists have mistaken Aqua Ardens (the water that burns) with Aqua Vitae. More advanced alchemists have recognised the differences between ethanol and methanol. However, some texts mistakenly list the following preparation for Aqua Ardens.

Alternative Preparation: Ferment wood chips for 2 months. Distill the broth five times. Place the ascentate in a pelican. Put the pelican in a fermenting bed of *finus equinis*. Allow to circulate. The liquid will separate into a lower turbid layer and a clear liquid. The result of the distillation in the pelican (basically a reflux condenser) will be 96% methanol. Methanol taken orally can cause blindness and death.

2. AQUA FORTIS Common [10]

Description: Acid.

Appearance: Clear liquid.

Effect: A fairly strong acid. Violently oxidizes organic material such as charcoal, turpentine and sawdust. In concentrated form, it is explosive with alcohol. "Acts" upon most metals, except platinum (mythral) and aluminium. Generally converts metals to nitrates or oxidizes them.

Ingredients: 6 parts saltpetre, 2 parts vitriol or alum.

Preparations: Dissolve 6 parts saltpetre and 2 part vitriol or alum in excess water. Distill and collect the ascentate.

Yield: 5 parts Aqua Fortis.

Notes: Aqua Fortis is known as Nitric Acid.

3. AQUA REGIS Rare [20]

Description: Strong acid, the water of kings.

Appearance: Clear yellowish liquid with a strong acidic odour.

Effect: A strong acid that will dissolve any metal.

Ingredients: 1 part Aqua Fortis, 1 part Sal Ammoniac, 1 part vitriol and excess water.

Preparations: Dissolve the Sal Ammoniac and vitriol in water. Distill in a pelican equipped with a serpent through which water is circulating. Collect the ascentate in a receiver, and mix with Aqua Fortis.

Yield: 4 parts Aqua Regis.

Notes: Aqua Regis is a 3 to 1 mixture of Hydrochloric and Nitric Acid. It is a powerful acid, capable of acting upon any of the metals.

4. AURA ARDENS Very Rare [35]

Description: The air that burns.

Appearance: Invisible gas.

Effect: When properly configured, A crude cutting torch is possible.

Ingredients: 3 parts coke, 7 parts quicklime, water.

Preparations: Mix 3 parts coke to 7 parts quicklime, in a sealed container and subject to maximum heat. Douse the greyish black powder ash with excess water and collect the vapours.

Yield: 3 parts Aura Ardens.

Notes: This is the process for the manufacture of acetylene. Note that the process also yield 4 parts of slaked lime.

5. CAUSTIC SODA Uncommon [5]

Description: Strong Caustic.

Appearance: White crystals w/glossy texture.

Effect: Will neutralize acids, corrosive in it's own right.

Ingredients: 53 parts Soda Ash, 36 parts slaked lime, excess water.

Preparations: Dissolve soda ash and slaked lime in water and mix. Strain to remove limestone, and heat gently to evaporate the liquid. Collect the solid caustic soda.

Yield: 40 parts Caustic Soda.

Notes: Sodium Hydroxide is highly caustic. 40 parts dry soda dissolved in 100 parts water will neutralize and equal volume of Aqua Fortis. The glossy texture is due to the tendency of the crystals to absorb water. If not carefully stored, the strength of the crystals will diminish.

6. CREAM OF TARTAR Common [5]

Description: Used in baking powder, and tinning of metals.

Appearance: White crystals.

Effect: Cream of Tartar is used in a variety of chemical operations. Primarily of importance due to its acid base chemistry.

Ingredients: Tartar and excess water.

Preparations: Extract tartar with boiling water, strain to remove the solid material, and crystallize in an ice bath.

Yield: 25%.

Notes: Although of limited use, the chemistry of tartar was common throughout historical Terran alchemy. Cream of tartar, Sal Tartar and Tartar were all commonly used in a variety of alchemical processes. Tartar is essentially a mixture of bitartrate of potash, and tartrate of lime. Sal Tartar, the salt of tartar and Cream of Tartar (potassium bitartrate) are common to alchemical operations as well.

7. ESSENTIAL OILS Common [0]

Description: Essences of various organic materials.

Appearance: Variable, colourful with fragrant odour.

Effect: Variable, Perfumes, flavouring, etc.

Dosage: Variable.

Ingredients: Target compound and Aqua Ardens.

Preparations: Dissolve in alcohol or steam distill.

Yield: Varies.

Notes: Some of the most common essential oils, their yields and uses are listed below.

| | | |
|-----------------|----------|--------------------------------|
| Allspice | 3,3-4,3% | Flavouring in pickles. |
| Almond (bitter) | 0,5-0,7% | Flavouring (baked goods). |
| Anise | 1,9-3,1% | Flavouring (confectionery). |
| Basil | 0,1% | Flavouring (condiments, etc.). |
| Bay (leaves) | 1-3% | Hair tonic/after shave. |
| Bergamot | 0,5% | Toilet water/colognes/soaps. |
| Birch, sweat | 0,1-0,2% | Liniment, toothpaste. |
| Rosewood | 0,7-1,2% | Soaps and perfumes. |
| Camphor | 1-3% | Soaps. |
| Canaga | 1% | Soaps and perfumes. |
| Caraway | 3-6% | Flavouring (condiments, etc.). |
| Cardamom | 3,5-7% | Curry powder/pickle flavour. |
| Cassia | 0,1-0,3% | Flavouring (candies, etc.). |
| Cedarwood | 0,5-1,2% | Fixatives, woody fragrances. |
| Cinnamon | 0,2-0,3% | Flavouring (baked goods). |

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| Citronella | 0,7% | Fragrance in soaps. |
| Clove | 15-18% | Medicines, and flavouring. |
| Coriander | 0,4-1,1% | Gins & vermouths. |

8. ETHER Uncommon [25]

Description: Volatile/Flammable.

Appearance: Clear liquid with potent smell.

Effect: Flammable (explosive), knockout gas.

Dosage: Inhale vapours (get a kick).

Antidote: Fresh air.

Ingredients: 1 part oil of vitriol and 23 parts aqua ardens.

Preparations: Mix oil of vitriol and aqua ardens. Distill.

Yield: 17 parts ether.

Notes: Diethyl ether is a highly vaporious and explosive compound. Alchemists are advised to mix it in small quantities, and very carefully. The vapour is heavier than air, and will rise out of the distillation equipment (when warm) and sink to the floor as it cools, possible filling much of the laboratory before coming in contact with the flame. The result of course are quite spectacular and devastating.

9. OIL OF MURIATE Very Rare [45]

Description: Acid.

Appearance: Clear, viscous liquid.

Effect: Strong Acid.

Ingredients: 1 part common salt.

Preparations: Dissolve the salt(s) in excess water, distill in a specially designed pelican. The ascentate must not be allowed to condense, but rather must be dissolved in water.

Yield: 1 part Oil of Muriate.

Notes: Hydrochloric acid is the most difficult of the acids to prepare. Common salt is the most direct approach, but Sal Ammoniac and vitriol or alum may also be used (see the menstrum for Aqua Regis, the first distillate is hydrochloric acid).

10. OIL OF VITRIOL Uncommon [25]

Description: Acid.

Appearance: Colourless, viscous liquid.

Effect: A very strong acid.

Ingredients: 4 parts alum, excess water.

Preparations: Dissolve the alum in water, and distill in a retort of brass, bronze or some other material resistant to heat and corrosion.

Yield: 1 part oil of vitriol.

Notes: Oil of Vitriol is known as sulfuric acid.

11. SLAKED LIME Common [0]

Description: Caustic lime.

Appearance: Soft white powder with alkaline/bitter taste.

Effect: Slaked lime is used in metallurgy.

Ingredients: 28 parts quicklime and excess water.

Preparations: Douse quicklime with water, crystallize and strain.

Yield: 37 parts Slaked Lime.

Notes: Water reacts with quicklime to give calcium hydroxide or slaked lime.

12. QUICKLIME Common [0]

Description: Caustic limestone.

Appearance: Greyish white powder, odourless.

Effect: Quicklime or Calx Viv is a mildly caustic material. It is used in several alchemical formulas and in mineral extraction. It will also neutralize acids.

Ingredients: Limestone, 100 parts.

Preparations: Grind limestone into a fine powder. Heat.

Yield: 56 parts quicklime.

Notes: Limestone (calcium carbonate) when heated releases gaseous carbon dioxide, leaving calcium oxide (quicklime).