# Chemist

# Pyrotechnician, bombardier, wizard, redneck miner, sapper, swamp gas gather, alchemist, tanner, priest metallurgist, dyer, cobbler, illuminator, lamplighter

"A pinch of sulfur, some copper fillings, and a bit of liquid brimstone and we get ....."

Chemistry has been practiced throughout history, often being explained as "magic" or "miracles." Common examples are; a Venkestran rune-priest imbuing a sword with freezing flames, a Khenti Death Mage animating a corpse, a Xingsol pyrotechnician shooting off fireworks, or a Lirian vaudevillian or magician creating illusions in smoke. All of these though have one things in common. They involve the manipulation of materials in the natural world through scientific principles in order to create strange and outlandish effects that were in the past shrouded in mystery, religion, and ritual.

These acts that were once thought to be miraculous have since been analyzed and can now be reproduced by a skilled chemist. As progress marches forward scientists have come to understand the inner workings of these ancient ways and explain them with chemistry. Mind you, it is not an easy discipline to master. While a first year chemist may be able to make explosives, it takes years of dedicated research and experimentation to unlock its many secrets. Some chemists will specialize in one small area their entire lives and barely scratch the surface. The inherent potential in this field is boundless, and well may be the way to solve the problems of man and society. Be assured, to dismiss the value and potency of chemistry would be a grave mistake.

### How it Works:

There are many elements in the known world, but only a small subset of them are what chemists label as **philium elements** or simply known as **philiums** after the Dolvan word for "active." These philiums may be catalyzed by the introduction of **reagents**. These are the substances that were previously known as elemental processes under the now antiquated Alchemical Model. Reagents do not exist in one state as most substances, but are in constant flux until they are introduced to a philium, where they can reach a stable form. A reagent in laboratory settings is typically kept in a fluid suspension inside specially treated glass. Releasing the potential secrets and energy of non-philum elements may be possible, but would require reagents beyond any known by current science.

Anyone from research scientists to tanners or miners can be considered a chemist simply based on the fact they work with these elements and reagents, some in more limited capacities than others.

#### The Known World of Chemistry:

Matter - Any substance found in the world.
Philium Elements - Matter that is most sensitive to change through reagents.
Energy - Forces that create change in the world around us.
Reagents - Energy that have been processed into usable suspensions that affect philiums.

Chemists can make grenades, explosives, protective oils, fuels, alloys, and other more esoteric items. Many things chemists make can be used by other professions to augment or build their items. Most items produced are single use (green tagged) items.

A chemist needs to learn how to properly conduct and reproduce formulas and experiments, so even someone who has read all the theory on a chemical reaction might still need some time and effort in order for them to create something practical in a controlled and safe setting.

All chemists know how to identify what type of substance has been created and how it needs to be contained, be it a grenade casing, a vial, an alloy that is stable with no receptacle, etc. When creating finished products a chemist is easily able to procure the casings, triggers, vials, and other components that are needed to make the substance functional. These additional parts do not cost the chemist any time or money.

Specially treated glass vials and metal container are the most common storage receptacles used by chemists. All chemists know how to handle them and avoid hazardous materials. Many chemists will always keep on them a pair of gloves and a respirator to protect them. Sometimes more intricate protective gear may be needed.

When experimenting with new formulas there are a few patterns that chemists may follow. For the most part a chemist may only mix one type of reagent with one or more philiums, depending on the chemist's rank.

Not all philium elements will react with all reagents.

Sometimes a combination of a philium and a reagent will create what looks like a useless mixture, may look that it only creates a useless mixture, but these solutions may be mixed with another philium or reagent to create something completely new. If the solution has the possibility of being mixed with something else it will be marked with an asterix.

## **Components and Working Materials:**

#### **Known Reagents:**

**Brimstone Agitator** is a reagent that agitates the philium element it is combined with. This usually makes materials volatile and is often associated with the creation of grenades or explosive traps. **Oil of Vitriol** produces slightly more stable results when combined with philum, usually in the form of a liquid, that release their energy slowly when they come into contact with certain other types of materials. Solutions like this can be used to make armor or weapons tougher or resistant to various elements, cause weapons to hold a stronger edge, etc.

**Aqua Fortis** is a reagent used for producing batteries and chemicals that can be used to power machines and devices. Basic fuels such as steam and oil are created by this as well as a wide array of other power sources.

**Aqua Regia** stabilizes elements, creating alloys out of them that can be used by artisans and engineers to allow them to make items of high quality. The products of Aqua Regia can also be used in the enhancement of other chemical combinations.

**Oil** is a black, liquid, synthesized reagent that has many uses. It is created through another chemical combination, but it can be found in nature and refined. It is used to fuel device, as well as a reagent for other chemistry. It is primarily used in conjunction with Aqua Regia. It may also be created by engineers.

**Petrol** is similar to oil in that is created through another chemical combination and it tends to be the byproduct of engineering experiments. It may also be created by engineers.

**Catalyst 17** is a newly discovered reagent which comes from an unknown source. It is only attainable from Soulton/Trevlis Industries, who has found a source or created it in the lab. The reagent itself has the side effects of being intoxicating and highly dangerous to those who handle it improperly. Chemists are not certain about its practical purposes. It seems to be sold as an illicit drug as often as it as a reagent. Some governments are moving to make it illegal, though no legislation has been passed as of yet.

#### **Known Philium Elements:**

#### Coal (Pure)

Black stone component. Only pure coal can be used safely as impurities can cause it to fail to produce anything or worse, produce something with an undesired effect. Coal is the most common philium element.

#### Tin (Pure or Refined)

Blue stone component, or bluish-grey powder when refined. It has been mined in great quantities around the Borealis Coast and is nearly as common as coal, at least in the new world.

#### Sulfur (Pure or Refined)

Common yellow powdery residue that is collected, refined, and stored in vials. It also may be found occasionally as caked yellow stones. Sulfur is common across Talus, but is found in great quantities near surface vents such as Xingsol, or near the remains of the Dolvan islands. This component is also used by engineers.

#### Copper (Pure)

Slightly shiny copper colored or orange stone component. Copper is considerably more expensive than coal but need not be as pure to be workable, it is associated with elemental effects.

#### Arsenic/Orpiment (Pure)

Bright pink stone component. Arsenic is known to have toxic properties though chemical processes usually don't draw them out, instead orpiment is used as an additive to increase potency in certain substances.

#### Mercury/Cinnabar (Pure)

Dark red or red stone component. Mercury is heavy and toxic and dangerous to work with, as such it is considered to be best left to journeymen or more advanced chemists.

#### Silver (Pure)

Shiny silver or gray colored stone component. Silver is expensive and as such is not often used by chemists learning the trade. It is known to resist rusting and tarnishing.

#### Ammonia/Hartshorn (Refined)

A white or off white stone component. Ammonia is expensive because it can be difficult or unsanitary to gather. Ammonia is disregarded by many chemists due to cultural taboo but is nonetheless viewed by many as a highly important philium element.

#### Lesser known philium elements

Rarer and more secretly guarded philium elements exist. A chemist must find a source for them, or someone willing to teach them in their uses. Some examples are:

Lirinium Delta Stone Mithril Gallium

Other elements are yet to be discovered or are highly guarded secrets.

# **Chemist Skills**

All chemists get one free skill at every new rank ending in a 1 (rank 1, 11, 21 and 31). These skills must be chosen from one of the three major areas of study. These are Technical, Theoretical, and Production. Chemists must purchase skills in area of study in order. For instance you must purchase Basic Theoretical Chemistry before you can purchase Intermediate Theoretical Chemistry. The free skill at each rank may be used to purchase either the next skill in a progression or to start a new area of study.

When learning new combinations a chemist must know all the combinations that proceed it for that element. For example if a chemist wanted to learn how to mix brimstone agitator with copper and coal to create a dual combination they would first need to have done the research for brimstone agitator with copper and brimstone agitator with coal at the single combination level.

Note: If another chemist gives you a formula in game, you must still learn the ones that precede it before performing that experiment. You must then put the results of the formula you learned in your BGS and spend 1 pp, which counts as having learned them. 1 pp will cover all formulas learned for a BGS cycle.

**Technical Chemistry** - These chemists are able to use philliums more efficiently and get the most out of their materials. At the highest level they are able to combine more philliums than most. *(Takes less components to create combinations and allows for high end combinations)* 

**Theoretical Chemistry** - These chemists are able to play in theoretical combinations, while also having a strong base and able to create basic combinations through experimentation without materials. (*Wide array of effects, some that may be the same as Technical Chemistry, while others create strange and interesting effects. Also allows for deeper research of chemistry*)

**Production Chemistry** - These chemists are the workhorses of the chemistry field. They may not know the most combinations, but they are able to produce great quantities of finished products quickly and efficiently. (*Bulk order of items, but constant large supply*)

## Apprentice: (Rank 1-10)

#### Reagent Preparation (Free to purchase/Cost to use: 1 pp)

A chemist sometimes finds themselves short on reagents. When this happens a chemist can distill an unstable version of any missing reagent they need for 1 profession point. This 1 pp will create enough of that specific reagent to sustain any level of experiment. Due to their unstable nature, they do not last long and cannot be brought into game or sold. They may however be used as a replacement for any reagents that are needed for between game skills. If they are not used during the between game period they are created in they are destroyed.

**Lab Research**: **(Free to purchase/Cost to use: variable)** Chemists don't know their way around a library as well as a scholar, but their knowledge of the subject matter of minerals and reagents allows them to make limited use of scholarly libraries. Chemists can spend profession points to gain information about previously discovered components and the products they produce but do so at a higher profession point cost than scholars.

#### Single Combinations (Free to purchase/ Cost to use: 1 pp)

All chemists begin with the ability to mix a single reagent and a single philium element together.

#### Foraging (Free to purchase/Cost to use: Varies)

Reagent preparation is sufficient to get the very basic reagents necessary for chemistry but finding coal and refining it to a pure state or scaring up copper by panning in a river require a bit more skill.

- Coal for 1 pp
- Copper for 2 pp
- Arsenic for 3 pp

#### Basic Technical Chemistry (5 pp \* number of other "Basic" skills/Cost to use: 2 pp)

Allows a chemist to make 3 of the same single reactions with only 2 phillium element.

#### Basic Theoretical Chemistry (5 pp \* number of other "Basic" skills)

Some chemists do not have access to resources or are simply not interested in creating finished goods. These chemists spend their days in the lab researching. They experiment with all manner of chemicals.

The chemist may learn combos without using components. It costs them the same amount of pp that the combination normally would. For instance it costs them 1 pp to learn a single combinations, 2 pp to learn 1 dual combinations, 3 pp to learn 1 triple combination, etc.

#### Basic Production Chemistry (5 pp \* number of other "Basic" skills)

Allows a chemist to make 2 of the same single reactions for the cost of 1pp.

### Journeyman: (Rank 11-20)

#### Dual Combinations (Free to purchase/ Cost to use: 2 pp)

The ability to combine 2 different philium elements with a specific reagent.

#### Reagent Specialization (10 pp to buy)

All chemists at journeyman level are able to pick one type of reagent and specialize in it.

# Intermediate Technical Chemistry (5 pp \* number of other "Intermediate" skills/Cost to use: 3pp)

Allows a chemist to make 2 of the same single reaction with only 1 phillium elements. Or 2 of the same dual reactions with only 3 phillium elements.

#### Intermediate Theoretical Chemistry (5 pp \* number of other "Intermediate" skills)

These chemists are able to produce strange, short lived, powerful combinations that are very unstable. These experiments normally have a very short shelf life. A date will be written on each one of these combinations with the expiration date. These experiments may not produce the same results every time.

#### Intermediate Production Chemistry (5 pp \* number of other "Intermediate" skills)

Allows a chemist to make 3 of the same single reactions for the cost of 1pp, or 2 of the same dual reactions for the cost of 2pp.

## Master: (Rank 21-30)

#### Triple Combinations (Free to purchase/ Cost to use: 3 pp)

The ability to combine 3 different philium elements with a specific reagent.

#### Natural Affinity (5 pp to purchase)

Allows a chemist to find rarer philium elements between games if they are lacking them.

- Mercury for 4 pp
- Silver for 5 pp
- Ammonia for 6 pp

#### Advanced Technical Chemistry (10 pp \* number of other "Advanced" skills/Cost to use 4 pp) Allows a chemist to make 3 of the same single reactions with only 1 phillium element, 2 of the same dual reactions with only 2 phillium elements, or 1 of the same triple reaction with only 2 phillium elements.

#### Advanced Theoretical Chemistry (10 pp \* number of other "Advanced" skills)

These chemists are able to take finished chemical products and through study identify what their base components are. They may also break down finished products and recover approximately a third of the components used.

#### Advanced Production Chemistry (10 pp \* number of other "Advanced" skills)

Allows a chemist to make 4 of the same single reactions for the cost of 1pp, 2 of the same dual reactions for the cost of 1pp, or 3 of the same triple combinations for the cost of 6pp.

### Grandmaster: (Rank 31+)

#### Quadruple Combinations (Free to purchase/ Cost to use: 4 pp)

The ability to combine 4 different philium elements with a specific reagent.

# Grandmaster Technical Chemistry (10 pp \* number of other "Grandmaster" skills/Cost to use: 5 pp)

*Quintuple Combinations* - The ability to combine 5 different philium elements with a specific reagent.

#### Grandmaster Theoretical Chemistry (10 pp \* number of other "Grandmaster" skills)

*Philium Mastery* - Allows the use of non-reactive elements not normally used in chemistry. There is no guarantee these experiments will work, and some of the reactions may only be maintained in a lab setting.

#### Grandmaster Production Chemistry (10 pp \* number of other "Grandmaster" skills)

*Distillation and Titration Process* - A chemist at this level is able to discern the specific concentrations of philliums and reagents in combinations.

Allows for the chemist to use more than one of the same phillium element in a combination

## Genius (Rank 35+)

#### **Opus:**

You may spend build and XP to create unique items which cannot otherwise be created by the chemist system. Doing so requires staff approval for the particular item being produced, staff will also set the price in both XP and build. Expect to spend 5-10 build per "Opus" created, which cannot be done more than once per season.

An opus may be a one of a kind item, it may also be a new discovery in the chemist trade which can be taught to others, or the combining of two things that were thought to be impossible.

# **In-Game Abilities**

At the start of each game players receive in game Chemist PP equal to their rank in Chemist. These profession points do NOT refresh during resets, and may be spent throughout the course of the weekend.

#### **Knowledge: Chemicals**

Minimum Rank: 1 Cost: 0 to read tags, variable based on cost listed on tags You gain the "Knowledge: Chemicals" skill exactly as listed in the rulebook.

#### **Identify Components**

Minimum Rank: 1 Cost: Varies based on component Chemists can expend profession points to identify the properties of components by consulting the Natural Philosophies Catalog in the library. While some elements and reagents may be unknown, the catalog will provide information that will give a chemist an idea of what a component does.

#### **Fast Fabricate Basic Chemicals**

Minimum Rank: 1

Cost: 1 pp, 1 component

By spending 5 seconds and expending an aqua fortis (electric), brimstone agitator (fire), aqua regia (cold), or oil of vitriol (acid) you can give someone a grenade, which must be thrown in the next 5 minutes, with the appropriate elemental effect attached to it. This effect can also be applied to the next swing of a melee weapon or used to bestow a RESIST to the next attack of the opposite chemical effect type which lasts five minutes if it goes unused.

#### **Chemical Countermeasures**

Minimum Rank: 11 Cost: 2 pp You may inspect an ally for 5 seconds who has put on goggles or tied a cloth around their nose and mouth. Bestow a RESIST NEXT STUN or RESIST NEXT GAS which goes away in 5 minutes if not used.

#### Flashbang

Minimum Rank: 21 Cost: 3 pp, <components> By spending 5 minutes you may prepare a GAS STUN, GAS TRIP, or GAS DISENGAGE grenade which can be given to another player as a BESTOW <Call> GRENADE. This must be used within the next hour.