LIQUID BARN

## 1 Batch Variables

| Batch Size | PG / VG Ratio | Base Strength | Target Strength | Flavor Strength |
|---|---|---|---|---|
| ml | / | mg | mg | % |

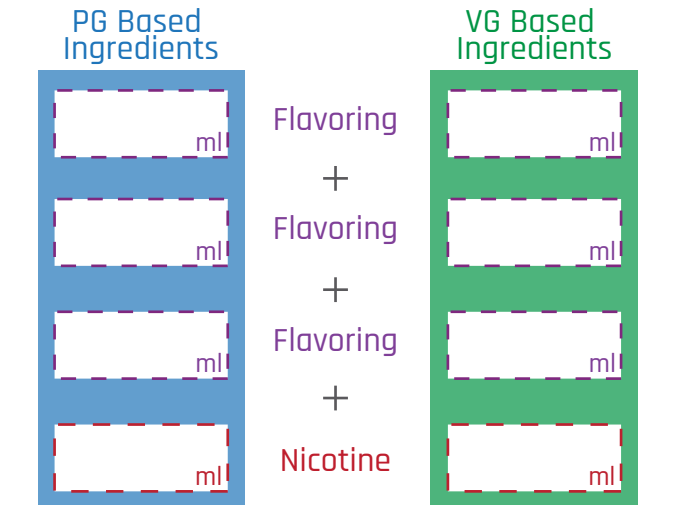
## 2 Flavoring Formula

% (Flavor Strength) × ml (Batch Size) = ml (Amount of **Total Flavoring**) ○ PG ○ VG

## 3 Nicotine Formula

Target Strength mg / Base Strength mg × ml (Batch Size) = ml (Amount of **Base Nicotine**) ○ PG ○ VG

## 4 Premix Breakdown




## 5 PG / VG Formula

% (PG Ratio) × ml (Batch Size) = ml (Total amount of **PG**)

% (VG Ratio) × ml (Batch Size) = ml (Total amount of **VG**)

## 6 Additional PG and VG

ml (Total amount of **PG**) − ml (Total amount of **PG based ingredients**) = ml (Additional **PG needed**)

ml (Total amount of **VG**) − ml (Total amount of **VG based ingredients**) = ml (Additional **VG needed**)

See back for instructions

# 1. Batch Variables

**Batch Size** - Your batch size is the quantity of eLiquid you are making.

**PG / VG Ratio** - The ratio between the total amount of Propylene Glycol and Vegetable Glycerin. The PG/VG ratio is represented in the form of percentages. If you wanted half and half in your recipe, it would be written as 50/50. Which is 50% PG and 50% VG.

**Base Strength** - Base strength refers to the strength of your Blended Nicotine. This is the nicotine you will be using in your recipe to reach your target strength.

**Target Strength** - Target strength refers to the nicotine strength you want your final mix to be.

**Flavor Strength** - Flavor Strength refers to the strength of flavoring you desire in your final mix. The strength of your flavoring is represented by a percentage. Often, flavors will come in a base of both PG and VG, use the dominant base.

*** Please remember that percentages should be converted to decimals before using them in your calculations.**

# 2. Flavor Formula

This formula is used for calculating each flavor you want to add to your recipe. Once you calculate the amount of flavoring needed, you must determine if your flavor is PG or VG based. After determining the base of your flavoring, you can add it to your Premix Breakdown under its corresponding base.

# 3. Nicotine Formula

This formula is used for calculating the amount of your Nicotine Blend that is needed to reach your Target Strength. Once you calculate the amount of nicotine needed, you must determine if your nicotine is PG or VG based. After determining the base of your nicotine, you can add it to your Premix Breakdown under its corresponding base.

# 4. Premix Breakdown

Once you have added all of your Flavoring and Nicotine to the premix chart, you need to add up all of your PG Based Ingredients and VG Based Ingredients. Your results will be subtracted from the total amount of PG and VG.

# 5. PG / VG Formula

This formula is used to calculate the total amount of PG and VG required in your recipe.

# 6. Additional PG and VG

Your nicotine and flavoring will be counted towards the total amount of PG and VG. The sum of your PG based ingredients will be subtracted from the total amount of PG, and the sum of your VG based ingredients will be subtracted from the total amount of VG. This will give you the amount of addtional PG and VG needed in your recipe to finalize your mix.

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## Calculating Percentages

To calculate percentages, you must first convert it to a decimal. This is easily done by moving the decimal 2 places to the left.


| Percent | Decimal |
|---|---|
| 15% | .15 |
| 10% | .10 |
| 5% | .05 |

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## Common PG/VG Ratios

| Characteristic | PG / VG Ratio |
|---|---|
| Neutral | 50 / 50 |
| Cloudy | 25 / 75 |
| + Throat Hit | 65 / 35 |