

SatrAPA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **38**
- SRM **7.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **10 liter(s)**
- Total mash volume **12.5 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **10 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Sparge using **5.2 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt | 1.9 kg (76%) | 80 % | 5 |
| Grain | Płatki owsiane | 0.1 kg (4%) | 60 % | 3 |
| Grain | Słód jęczmienny wędzony bukiem | 0.2 kg (8%) | 82 % | 6 |
| Grain | Caramunich® typ I | 0.3 kg (12%) | 73 % | 80 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Horizon | 10 g | 60 min | 14 % |
| Boil | Horizon | 5 g | 5 min | 14 % |
| Boil | Azacca | 5 g | 5 min | 14 % |
| Boil | Nugget | 5 g | 1 min | 13 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 5.75 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|-------|---------|------|------|--------|
| Spice | Werbena | 10 g | Boil | 10 min |
|-------|---------|------|------|--------|