

Californication

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **28**
- SRM **4.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **44 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **48.3 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **33.8 liter(s)**
- Total mash volume **41.3 liter(s)**

Steps

- Temp **50 C**, Time **5 min**
- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **33.8 liter(s)** of strike water to **53.3C**
- Add grains
- Keep mash **5 min** at **50C**
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **22 liter(s)** of **76C** water or to achieve **48.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 7 kg (93.3%) | 80 % | 5 |
| Grain | Strzegom Bursztynowy | 0.5 kg (6.7%) | 70 % | 49 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 20 g | 60 min | 15.5 % |
| Aroma (end of boil) | Citra | 25 g | 10 min | 12 % |
| Aroma (end of boil) | Citra | 25 g | 5 min | 12 % |
| Aroma (end of boil) | Columbus/Tomahawk/Zeus | 50 g | 0 min | 15.5 % |
| Aroma (end of boil) | Citra | 50 g | 0 min | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-05 | Ale | Dry | 11 g | fermentis |