

Capitan America

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **29**
- SRM **6.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **3 %**
- Size with trub loss **22.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

Steps

- Temp **40 C**, Time **30 min**
- Temp **63 C**, Time **40 min**
- Temp **73 C**, Time **20 min**
- Temp **77 C**, Time **15 min**

Mash step by step

- Heat up **16.8 liter(s)** of strike water to **43.3C**
- Add grains
- Keep mash **30 min** at **40C**
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **73C**
- Keep mash **15 min** at **77C**
- Sparge using **15.6 liter(s)** of **76C** water or to achieve **26.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|---------------|-------|-----|
| Grain | Strzegom Pale Ale | 5 kg (89.3%) | 79 % | 6 |
| Grain | Strzegom Monachijski typ II | 0.5 kg (8.9%) | 79 % | 22 |
| Grain | Weyermann - Carawheat | 0.1 kg (1.8%) | 77 % | 125 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|-----------|------------|
| Boil | Centennial | 14 g | 60 min | 9.4 % |
| Boil | Cascade | 14 g | 30 min | 7.1 % |
| Boil | Centennial | 7 g | 30 min | 9.4 % |
| Aroma (end of boil) | Cascade | 7 g | 15 min | 7.1 % |
| Aroma (end of boil) | Cascade | 6 g | 0 min | 7.1 % |
| Dry Hop | Cascade | 23 g | 15 day(s) | 7.1 % |
| Dry Hop | Centennial | 29 g | 15 day(s) | 9.4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|-------------|-------------|---------------|-------------------|
| US-05 | Ale | Dry | 11.5 g | Fermentis |