

APA2

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **38**
- SRM **4.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **8 %/h**
- Boil size **29.6 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **23.9 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18.6 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **29.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 4.5 kg (84.9%) | 80 % | 4 |
| Grain | Weyermann - Carapils | 0.3 kg (5.7%) | 78 % | 4 |
| Grain | Carahell | 0.5 kg (9.4%) | 77 % | 26 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil | Warrior | 20 g | 60 min | 15.5 % |
| Boil | Mosaic | 10 g | 10 min | 13.2 % |
| Boil | Simcoe | 10 g | 10 min | 13.2 % |
| Aroma (end of boil) | Mosaic | 10 g | 0 min | 13.2 % |
| Aroma (end of boil) | Simcoe | 10 g | 0 min | 13.2 % |
| Dry Hop | Simcoe | 30 g | 5 day(s) | 13.2 % |
| Dry Hop | Cascade | 30 g | 5 day(s) | 5.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11 g | Safale |