

AAA

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU ---
- SRM **14.1**
- Style **American Amber Ale**

Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **27 liter(s)**
- Total mash volume **36 liter(s)**

Steps

- Temp **62 C**, Time **50 min**
- Temp **72 C**, Time **90 min**
- Temp **77 C**, Time **15 min**

Mash step by step

- Heat up **27 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **50 min** at **62C**
- Keep mash **90 min** at **72C**
- Keep mash **15 min** at **77C**
- Sparge using **32.6 liter(s)** of **76C** water or to achieve **50.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|---------------|-------|-----|
| Grain | Malteurop Pilsner | 6 kg (66.7%) | --- % | 4 |
| Grain | Optima Monachijski | 2 kg (22.2%) | --- % | 19 |
| Grain | Strzegom Karmel 600 | 0.5 kg (5.6%) | 68 % | 601 |
| Grain | Optima karmelowy jasny | 0.5 kg (5.6%) | --- % | 25 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|----------|------------|
| Dry Hop | Citra | 50 g | 7 day(s) | 12 % |
| Dry Hop | Simcoe | 50 g | 7 day(s) | 13.2 % |
| Dry Hop | Cascade | 50 g | 7 day(s) | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 23 g | Fermentis |