

AAA

- Gravity **13.1 BLG**
- ABV ---
- IBU **50**
- SRM **14.4**
- Style **American Amber Ale**

Batch size

- Expected quantity of finished beer **12.5 liter(s)**
- Trub loss **10 %**
- Size with trub loss **13.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **17.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **9.8 liter(s)**
- Total mash volume **12.8 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **9.8 liter(s)** of strike water to **75.3C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **10.5 liter(s)** of **76C** water or to achieve **17.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|-----------------|-------|-----|
| Grain | Strzegom Pale Ale | 2.2 kg (74.2%) | 79 % | 6 |
| Grain | Strzegom Monachijski typ I | 0.5 kg (16.9%) | 79 % | 16 |
| Grain | Strzegom Karmel 300 | 0.166 kg (5.6%) | --- % | 299 |
| Grain | Carahell | 0.1 kg (3.4%) | --- % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Warrior | 10 g | 60 min | 17 % |
| Boil | Summit | 15 g | 15 min | 14 % |
| Aroma (end of boil) | Cascade | 16 g | 0 min | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 60 ml | fermentis |