

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