

hop Session

- Gravity **14.3 BLG**
- ABV ---
- IBU **111**
- SRM **10.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **24 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

- Temp **68 C**, Time **50 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **13.4 liter(s)** of **76C** water or to achieve **24 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4 kg (75.5%)	79 %	6
Grain	Pilznieński	1 kg (18.9%)	81 %	4
Grain	Strzegom Karmel 150	0.3 kg (5.7%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	60 min	13.5 %
Boil	Citra	30 g	60 min	12 %
Aroma (end of boil)	Simcoe	20 g	30 min	13.2 %
Aroma (end of boil)	Citra	30 g	10 min	12 %
Aroma (end of boil)	Mosaic	15 g	15 min	10 %