

Cascade sh

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **24**
- SRM **6.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **10 %**
- Size with trub loss **14.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **25 %/h**
- Boil size **19.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

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

Mash step by step

- Heat up **12 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **19.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3 kg (75%)	85 %	7
Grain	Strzegom Monachijski typ I	1 kg (25%)	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	20 g	60 min	6 %
Boil	Cascade	20 g	10 min	6 %
Aroma (end of boil)	Cascade	20 g	0 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis