

Caskaderowy czad

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **29**
- SRM **4.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **26.2 liter(s)**

Steps

- Temp **67 C**, Time **85 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **20.1 liter(s)** of strike water to **74.1C**
- Add grains
- Keep mash **85 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (82%)	80 %	5
Grain	Pszeniczny	1 kg (16.4%)	85 %	4
Grain	Strzegom Zakwaszający	0.1 kg (1.6%)	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	20 g	60 min	12.5 %
Boil	Cascade PL	20 g	20 min	5.5 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Water Agent	Kwasek cytrynowy	0.75 g	Boil	60 min