

Czacade

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **27**
- SRM **3.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **62 C**, Time **10 min**
- Temp **45 C**, Time **72 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **49.2C**
- Add grains
- Keep mash **72 min** at **45C**
- Keep mash **10 min** at **62C**
- Keep mash **10 min** at **75C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (80%)	81 %	4
Grain	Pale Malt (2 Row) US	1 kg (20%)	79 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	40 g	30 min	7 %
Aroma (end of boil)	Cascade	10 g	5 min	7 %
Aroma (end of boil)	Lublin (Lubelski)	20 g	5 min	4 %
Dry Hop	Cascade	10 g	3 day(s)	7 %