

Czekoladowe

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **58**
- SRM **17.3**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.6 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **29.8 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **23.4 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18.2 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **29.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ II	2 kg (38.5%)	85 %	22
Grain	Viking Pale Ale malt	3 kg (57.7%)	85 %	5
Grain	Strzegom Czekoladowy ciemny	0.2 kg (3.8%)	68 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	20 g	65 min	16.3 %
Boil	Columbus/Tomahawk/Zeus	20 g	35 min	16.3 %
Boil	Columbus/Tomahawk/Zeus	10 g	5 min	16.3 %
Dry Hop	Citra	60 g	4 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa - Belgian Fruit & Spicy	Ale	Dry	10 g	Gozdawa