

Cobra 1

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **40**
- SRM **10.6**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **30.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.6 liter(s)**
- Total mash volume **27.7 liter(s)**

Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **21.6 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **30.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski Weyermann	5 kg (81.1%)	80 %	22
Grain	Platki owsiane	0.33 kg (5.4%)	85 %	3
Grain	Simpsons - Golden Naked Oats	0.11 kg (1.8%)	73 %	20
Grain	Simpsons - Aromatic Malt	0.25 kg (4.1%)	82.5 %	49
Grain	Diastatyczny	0.25 kg (4.1%)	80 %	4
Grain	Weyermann - Melanoiden Malt	0.125 kg (2%)	81 %	53
Grain	Cara Gold Castlemalting	0.1 kg (1.6%)	78 %	120

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Azacca	15 g	50 min	14 %
Boil	Azacca	10 g	15 min	14 %
Boil	Galaxy	30 g	10 min	14.5 %
Boil	ekuanot	10 g	5 min	13.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar BRY-97	Ale	Dry	11 g	---

Extras

Type	Name	Amount	Use for	Time
Fining	protafloc	1 g	Boil	15 min