

#23 COLD HOPS v3

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **36**
- SRM **5.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **50 min**
- Evaporation rate **5 %/h**
- Boil size **30 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.8 liter(s) / kg**
- Mash size **20.9 liter(s)**
- Total mash volume **26.4 liter(s)**

Steps

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

Mash step by step

- Heat up **20.9 liter(s)** of strike water to **74.3C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **30 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Bestt Pale Ale	5 kg (90.9%)	75 %	7
Grain	Biscuit Malt	0.25 kg (4.5%)	80 %	45
Grain	Pszeniczny	0.25 kg (4.5%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Nelson Sauvín	10 g	45 min	11 %
Boil	Moutere	10 g	45 min	14.9 %
Aroma (end of boil)	Nelson Sauvín	30 g	5 min	11 %
Aroma (end of boil)	Moutere	30 g	5 min	14.9 %
Dry Hop	Nelson Sauvín	35 g	4 day(s)	11 %
Dry Hop	Moutere	35 g	4 day(s)	14.5 %
Dry Hop	Simcoe	50 g	2 day(s)	13.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Us-05	Ale	Slant	200 ml	Safale

Extras

Type	Name	Amount	Use for	Time
Fining	Whirflock	5 g	Boil	10 min