

India Pale Ale

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **57**
- SRM **5.5**
- Style **Imperial IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **26.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **63 C**, Time **60 min**
- Temp **67 C**, Time **30 min**
- Temp **72 C**, Time **20 min**
- Temp **79 C**, Time **10 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **30 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **79C**
- Sparge using **12.9 liter(s)** of **76C** water or to achieve **26.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (55.2%)	80 %	5
Grain	płatki jęczmienne	0.5 kg (6.9%)	60 %	4
Grain	Viking Pilsner malt	1 kg (13.8%)	82 %	4
Grain	Weyermann pszeniczny jasny	0.5 kg (6.9%)	80 %	5
Grain	Weyermann - Carapils	0.5 kg (6.9%)	78 %	4
Grain	Monachijski typ II 20-25 EBC Weyermann	0.5 kg (6.9%)	80 %	20
Sugar	Cukier kandyzowany belgijski BRAZOWY	0.25 kg (3.4%)	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	60 g	30 min	10 %
Boil	Styrian Wolf	30 g	10 min	11.1 %

Boil	Bramling	30 g	10 min	6 %
Dry Hop	Oktawia	90 g	10 day(s)	7.1 %
Dry Hop	Styrian Dragon	60 g	10 day(s)	7.2 %
Dry Hop	Palisade	30 g	10 day(s)	7.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	8.5 g	Fermentis