

Ecstasy

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **53**
- SRM **5.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **19.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.8 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.75 liter(s) / kg**
- Mash size **21.4 liter(s)**
- Total mash volume **27.1 liter(s)**

Steps

- Temp **67 C**, Time **65 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **21.4 liter(s)** of strike water to **73.3C**
- Add grains
- Keep mash **65 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **11.1 liter(s)** of **76C** water or to achieve **26.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.75 kg (48.2%)	80 %	5
Grain	Strzegom Wiedeński	0.5 kg (8.8%)	79 %	10
Grain	Pszeniczny	1.2 kg (21.1%)	85 %	4
Grain	Biscuit Malt	0.25 kg (4.4%)	79 %	45
Grain	Płatki owsiane	0.5 kg (8.8%)	60 %	3
Grain	Rye, Flaked	0.5 kg (8.8%)	78.3 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Idaho 7	30 g	60 min	12.7 %
Boil	Idaho 7	20 g	5 min	12.7 %
Boil	Talus	50 g	5 min	7.4 %
Dry Hop	Riwaka	50 g	3 day(s)	17 %
Dry Hop	Idaho 7	50 g	3 day(s)	12.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Mangrove Jack's M12 Voss Kveik	Ale	Dry	10 g	Mangrove Jack's
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Extras

Type	Name	Amount	Use for	Time
Fining	whirlfoc	2 g	Boil	10 min
Water Agent	gips piwowarski	5 g	Mash	---