

ne

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **31**
- SRM **4.1**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **35 liter(s)**
- Trub loss **5 %**
- Size with trub loss **37.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **41.9 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **26.4 liter(s)**
- Total mash volume **35.2 liter(s)**

### Steps

- Temp **64 C**, Time **80 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **26.4 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **80 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **24.3 liter(s)** of **76C** water or to achieve **41.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	7 kg (79.5%)	80 %	5
Grain	Weyermann - Carapils	0.8 kg (9.1%)	78 %	4
Grain	Płatki owsiane	0.5 kg (5.7%)	85 %	3
Grain	Pszeniczny	0.5 kg (5.7%)	85 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	45.94 g	30 min	4.5 %
Aroma (end of boil)	Citra	43.75 g	10 min	12 %
Citra 45 g + Mosaic 45 g jako zamienniki dla 90-100 g Falconers Flight				
Aroma (end of boil)	Mosaic	43.75 g	10 min	10 %
Dry Hop	Cascade	87.5 g	8 day(s)	6 %
Dry Hop	Vic Secret	87.5 g	8 day(s)	16.3 %
Dry Hop	Lemon Drop	87.5 g	8 day(s)	4.6 %
Dry Hop	Equinox	43.75 g	8 day(s)	13.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Safale US-05	Ale	Slant	765.63 ml	Fermentis
starter 150ml w celu rehydratacji drozdzy				
FM55 Zielone Wzgórze	Ale	Slant	765.63 ml	Fermentum Mobile
1000ml starter z FM55				

### Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	15.31 g	Boil	15 min
Water Agent	gips piwowarski	6.13 g	Mash	---