

IPA

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **69**
- SRM **8.6**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **4 %**
- Size with trub loss **22.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **88.5 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.2 liter(s)**
- Total mash volume **22.9 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **17.2 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **77C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (69.9%)	80 %	5
Grain	Viking Wheat Malt	0.5 kg (8.7%)	83 %	5
Grain	Abbey Malt Weyermann	0.22 kg (3.8%)	75 %	45
Grain	Viking melanoidynowy	1 kg (17.5%)	75 %	60

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	30 g	60 min	10 %
Boil	Pacific Jade	10 g	60 min	13.4 %
Boil	Green Bullet	50 g	15 min	12.7 %
Boil	Taiheke	50 g	0 min	7.6 %
Boil	Pacific Jade	40 g	0 min	13.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Liquid	200 ml	Fermentum Mobile