

IPA 88/89

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **45**
- SRM **4.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **5 %**
- Size with trub loss **52.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **67.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **70 liter(s)**
- Total mash volume **84 liter(s)**

Steps

- Temp **69 C**, Time **60 min**

Mash step by step

- Heat up **70 liter(s)** of strike water to **73.9C**
- Add grains
- Keep mash **60 min** at **69C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **67.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	8 kg (57.1%)	82 %	4
Grain	Cara-Pils/Dextrine	1 kg (7.1%)	72 %	4
Grain	CaraBody	1 kg (7.1%)	72 %	8
Grain	Vienna Malt	4 kg (28.6%)	78 %	8

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	90 g	60 min	9.4 %
Boil	Citra	30 g	20 min	11.1 %
Boil	Citra	30 g	10 min	11.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis
Lallemand - LalBrew Voss Kveik	Ale	Dry	11 g	Lallemand