

## XII

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **60**
- SRM **5.7**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **25.2 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **75.2C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **20.9 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (69.4%)	80 %	5
Grain	Pszeniczny	1 kg (13.9%)	85 %	4
Grain	Biscuit Malt	0.5 kg (6.9%)	79 %	45
Grain	Płatki pszeniczne	0.5 kg (6.9%)	85 %	3
Grain	Płatki owsiane	0.2 kg (2.8%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	60 min	11 %
Aroma (end of boil)	Cascade	20 g	10 min	6 %
Whirlpool	Cascade	80 g	30 min	6 %
Whirlpool	Amarillo	50 g	30 min	9.5 %
Dry Hop	Mosaic	100 g	2 day(s)	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM53 Voss kveik	Ale	Liquid	1500 ml	FM