

## test

---

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **44**
- SRM **8.9**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **2 %**
- Size with trub loss **23.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **17.6 liter(s)**
- Total mash volume **23.1 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **17.6 liter(s)** of strike water to **75.5C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (90.9%)	80 %	5
Grain	Strzegom Karmel 150	0.5 kg (9.1%)	75 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	15 g	60 min	10.5 %
Boil	Centennial	35 g	30 min	10.5 %
Aroma (end of boil)	Centennial	40 g	0 min	10.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11 g	---

### Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc	1.2 g	Boil	5 min
Water Agent	gips	7 g	Mash	60 min