

## 14z48

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **64**
- SRM **7.4**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **4 %**
- Size with trub loss **28.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **33.7 liter(s)**

### Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.4 liter(s)**
- Total mash volume **28.6 liter(s)**

### Steps

- Temp **67.5 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **21.4 liter(s)** of strike water to **75.4C**
- Add grains
- Keep mash **70 min** at **67.5C**
- Keep mash **10 min** at **78C**
- Sparge using **19.5 liter(s)** of **76C** water or to achieve **33.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale Zero	5.35 kg (74.8%)	80 %	6.5
Grain	Wiedeński Viking	1 kg (14%)	79 %	10
Grain	Płatki owsiane	0.4 kg (5.6%)	85 %	3
Grain	Karmelowy 30 EBC Viking	0.3 kg (4.2%)	--- %	30
Grain	Caraaroma (R) 300-400 EBC	0.1 kg (1.4%)	--- %	350

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe 13,3 % aa	25 g	60 min	13.3 %
Boil	Simcoe 13,3 % aa	25 g	40 min	13.3 %
Boil	Amarillo 8,9 % aa	35 g	15 min	8.9 %
Boil	Cascade 6,8 % aa	25 g	5 min	6.8 %
Dry Hop	Cascade 6,8 % aa	25 g	7 day(s)	6.8 %
Dry Hop	CTZ 12,2 % aa	25 g	7 day(s)	12.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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US-05	Ale	Dry	11.5 g	Fermentis
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### Extras

Type	Name	Amount	Use for	Time
Water Agent	gips piwowarski	3 g	Mash	80 min
Fining	Whirlfloe T	2 g	Boil	10 min