

## Proces karny

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **39**
- SRM **6.3**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **18 liter(s)**

### Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **10.3 liter(s)**
- Total mash volume **14.3 liter(s)**

### Steps

- Temp **66 C**, Time **75 min**

### Mash step by step

- Heat up **10.3 liter(s)** of strike water to **75.2C**
- Add grains
- Keep mash **75 min** at **66C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **18 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (73.2%)	80 %	5
Grain	Pszeniczny	1 kg (24.4%)	85 %	4
Grain	Strzegom Karmel 150	0.1 kg (2.4%)	75 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	15 g	60 min	13.3 %
Aroma (end of boil)	Simcoe	15 g	5 min	13.3 %
Whirlpool	Simcoe	10 g	60 min	13.3 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	8 g	Fermentis