

## #3\_21\_ŚwierkALE

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **28**
- SRM **6.3**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **6.1 liter(s) / kg**
- Mash size **33.5 liter(s)**
- Total mash volume **39 liter(s)**

### Steps

- Temp **69 C**, Time **240 min**

### Mash step by step

- Heat up **33.5 liter(s)** of strike water to **73C**
- Add grains
- Keep mash **240 min** at **69C**
- Sparge using **-2 liter(s)** of **76C** water or to achieve **26 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Pale Ale	5 kg (90.9%)	80 %	8
Grain	Carahell	0.5 kg (9.1%)	77 %	26

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	25 g	60 min	10.3 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M12 Voss Kveik	Ale	Dry	11 g	Mangrove Jack's

### Extras

Type	Name	Amount	Use for	Time
Flavor	Pędy świerku	140 g	Boil	30 min
Flavor	Pędy świerku	100 g	Boil	2 min
Fining	whirfloc	1 g	Boil	10 min