

# Smoked Ella Pils

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **31**
- SRM **4.2**
- Style **Bohemian Pilsener**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **3 %**
- Size with trub loss **24.7 liter(s)**
- Boil time **65 min**
- Evaporation rate **7 %/h**
- Boil size **28.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 liter(s)**

## Steps

- Temp **67 C**, Time **50 min**
- Temp **78 C**, Time **20 min**

## Mash step by step

- Heat up **22.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **20 min** at **78C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **28.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	4 kg (61.5%)	80 %	4
Grain	Weyermann - Smoked Malt	0.5 kg (7.7%)	81 %	6
Grain	Simpsons Best Pale Ale	2 kg (30.8%)	85 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	10 g	50 min	16.3 %
Aroma (end of boil)	Ella (AUS)	20 g	10 min	15.4 %
Whirlpool	Ella (AUS)	30 g	10 min	15.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Kveik Oslo	Lager	Slant	100 ml	---

## Extras

Type	Name	Amount	Use for	Time
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Fining	Protafloc	2 g	Boil	15 min
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