

# Birch Smoked Lager

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- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **35**
- SRM **4.2**
- Style **Classic American Pilsner**

## Batch size

- Expected quantity of finished beer **10.5 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14.4 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.5 liter(s)**
- Total mash volume **10 liter(s)**

## Steps

- Temp **63 C**, Time **50 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **7.5 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **50 min** at **63C**
- Keep mash **1 min** at **78C**
- Sparge using **9.4 liter(s)** of **76C** water or to achieve **14.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Malt Wędzony Brzoza	2 kg (80%)	82 %	7
Grain	Rice, Flaked	0.5 kg (20%)	70 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	15 g	60 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Munich Lager	Lager	Liquid	500 ml	Wyeast Labs

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	3 g	Boil	10 min