

# Ciemniuch - braciszek z Polski

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **34**
- SRM **39.2**
- Style **Dark American Lager**

## Batch size

- Expected quantity of finished beer **13.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **17.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.1 liter(s) / kg**
- Mash size **12.2 liter(s)**
- Total mash volume **16.2 liter(s)**

## Steps

- Temp **55 C**, Time **10 min**
- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **12.2 liter(s)** of strike water to **60.7C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **8.9 liter(s)** of **76C** water or to achieve **17.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	3.15 kg (79.7%)	82 %	4
Grain	Weyermann - Carawheat	0.3 kg (7.6%)	77 %	110
Grain	Weyermann - Chocolate Wheat	0.3 kg (7.6%)	74 %	900
Grain	Carafa III	0.2 kg (5.1%)	70 %	1300

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	24 g	60 min	7 %
Boil	Sybilla	14 g	20 min	7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
GĘSTWÓCH Saflager W 34/70	Lager	Slant	200 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Fining	whirlfloc	1 g	Boil	10 min