

# Gruszka z ogniska

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **28**
- SRM **7.5**
- Style **Classic Rauchbier**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.5 liter(s)**
- Total mash volume **30 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **40 min**
- Temp **74 C**, Time **30 min**

## Mash step by step

- Heat up **22.5 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **74C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Wędzony Steinbach	5 kg (66.7%)	80 %	5
Grain	Strzegom Monachijski typ II	1 kg (13.3%)	79 %	22
Grain	Strzegom Wiedeński	1 kg (13.3%)	79 %	10
Grain	Karmelowy Czerwony	0.5 kg (6.7%)	75 %	59

## Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Marynka	30 g	60 min	7.9 %
Boil	Lublin (Lubelski)	20 g	30 min	4.3 %
Boil	Lublin (Lubelski)	30 g	10 min	4.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM31 Bawarska Dolina	Lager	Liquid	1700 ml	Fermentum Mobile