

# Otter

- Gravity **15 BLG**
- ABV ---
- IBU **32**
- SRM **40**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **26.9 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.4 liter(s)**
- Total mash volume **21.8 liter(s)**

## Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **16.4 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **26.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.5 kg (82.6%)	81 %	4
Grain	Strzegom Czekoladowy ciemny	0.15 kg (2.8%)	68 %	1200
Grain	Jęczmień palony	0.25 kg (4.6%)	55 %	985
Grain	Carahell	0.25 kg (4.6%)	77 %	26
Grain	Caraaroma	0.3 kg (5.5%)	78 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	80 min	8.4 %
Boil	Lublin (Lubelski)	25 g	30 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale

## Extras

Type	Name	Amount	Use for	Time
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Flavor	laktoza	400 g	Boil	30 min
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