

# oak festyn

- Gravity **18.9 BLG**
- ABV ---
- IBU **36**
- SRM **45**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

## Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **10.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **5.7 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (81.1%)	81 %	4
Grain	Caraaroma	0.3 kg (8.1%)	78 %	400
Grain	Carafa	0.1 kg (2.7%)	70 %	664
Grain	Jęczmień palony	0.1 kg (2.7%)	55 %	985
Adjunct	płatki jęczmienne	0.2 kg (5.4%)	1 %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Aurora	20 g	55 min	8.5 %
Boil	Styrian Golding	20 g	10 min	3.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us -05	Ale	Dry	11.5 g	---

## Extras

Type	Name	Amount	Use for	Time
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Other	płatki dębowy	20 g	Secondary	14 day(s)
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