

# festyn

- Gravity **17 BLG**
- ABV ---
- IBU **37**
- SRM **40**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **65 min**
- Evaporation rate **15 %/h**
- Boil size **12.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.3 liter(s)**
- Total mash volume **12.4 liter(s)**

## Steps

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

## Mash step by step

- Heat up **9.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **30 min** at **72C**
- Sparge using **6.6 liter(s)** of **76C** water or to achieve **12.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.6 kg (78.8%)	81 %	4
Grain	Caraaroma	0.3 kg (9.1%)	78 %	400
Grain	Jęczmień palony	0.1 kg (3%)	55 %	985
Grain	Carafa	0.1 kg (3%)	70 %	664
Adjunct	płatki jęczmienne	0.2 kg (6.1%)	1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Styrian Goldings	20 g	10 min	3.5 %
Boil	Aurora	20 g	55 min	8.5 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Other	płatki jęczmienne	200 g	Mash	75 min