

# CZEKOLADOWY FES

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **26**
- SRM **26.8**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.6 liter(s)**
- Total mash volume **12.8 liter(s)**

## Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **9.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **8.8 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.5 kg (78.1%)	79 %	6
Grain	Strzegom Monachijski typ I	0.25 kg (7.8%)	79 %	16
Grain	płatki jęcznienne	0.2 kg (6.3%)	80 %	2
Grain	Strzegom Czekoladowy ciemny	0.125 kg (3.9%)	68 %	1200
Grain	Jęczmień palony	0.125 kg (3.9%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Brewers Gold	25 g	30 min	7.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	1000 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
------	------	--------	---------	------

Flavor	ziarno kakaowca	50 g	Boil	15 min
--------	-----------------	------	------	--------