

# Wędzony FES

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **58**
- SRM **56.6**
- 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 **14 liter(s)**
- Total mash volume **18.6 liter(s)**

## Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **14 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **5.9 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann Wędzony bukiem	3 kg (64.5%)	82 %	10
Grain	Słód owsiany	0.5 kg (10.8%)	61 %	5
Grain	Special B Malt	0.3 kg (6.5%)	65.2 %	315
Grain	Caraaroma	0.1 kg (2.2%)	78 %	400
Grain	Fawcett - Pszeniczny Czekoladowy	0.25 kg (5.4%)	73 %	1200
Grain	Carafa	0.2 kg (4.3%)	70 %	664
Grain	Viking Czekoladowy ciemny	0.2 kg (4.3%)	67 %	900
Grain	Jęczmień palony	0.1 kg (2.2%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	34 g	60 min	11.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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WLP004 - Irish Ale Yeast	Ale	Slant	100 ml	White Labs
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## Notes

- Słody ciemne dodane w połowie drugiej przerwy 72 stopnie.  
*Jul 28, 2022, 6:06 PM*