

## #53 FES wspaniały

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **50**
- SRM **26.8**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **7 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.2 liter(s)**

### Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.2 liter(s)**
- Total mash volume **29.6 liter(s)**

### Steps

- Temp **64 C**, Time **60 min**

### Mash step by step

- Heat up **22.2 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Sparge using **11.4 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5 kg (67.6%)	85 %	7
Grain	Weyermann Monachijski typ II	1 kg (13.5%)	79 %	22
Grain	Żytni	0.35 kg (4.7%)	85 %	8
Grain	Barley, Flaked	0.35 kg (4.7%)	70 %	4
Grain	Fawcett - Pale Chocolate	0.7 kg (9.5%)	71 %	600

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	70 g	50 min	8.4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM52	Ale	Slant	170 ml	---

### Extras

Type	Name	Amount	Use for	Time
Other	Płatki dębowe z czarnego jacka	50 g	Secondary	20 day(s)