

# Whisky FES

- Gravity **18.7 BLG**
- ABV ---
- IBU **37**
- SRM **46.9**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **17 %**
- Size with trub loss **14 liter(s)**
- Boil time **60 min**
- Evaporation rate **1 %/h**
- Boil size **14.3 liter(s)**

## Mash information

- Mash efficiency **87 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.9 liter(s)**
- Total mash volume **17.2 liter(s)**

## Steps

- Temp **66 C**, Time **45 min**
- Temp **70 C**, Time **15 min**

## Mash step by step

- Heat up **12.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **15 min** at **70C**
- Sparge using **5.7 liter(s)** of **76C** water or to achieve **14.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.5 kg (34.9%)	80 %	3
Grain	Peat Smoked Malt	2 kg (46.5%)	74 %	6
Grain	Brown Malt (British Chocolate)	0.2 kg (4.7%)	70 %	128
Grain	Strzegom Czekoladowy 1200	0.2 kg (4.7%)	68 %	1200
Grain	Jęczmień palony	0.4 kg (9.3%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	26 g	60 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Slant	40 ml	Danstar

## Extras

Type	Name	Amount	Use for	Time
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Other	Płatki amerykańskie HEAVY	26 g	Secondary	10 day(s)
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