

# Whisky Stout

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **34**
- SRM **46.3**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.1 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.5 liter(s)**
- Total mash volume **31.4 liter(s)**

## Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **23.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **27.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (38.2%)	80 %	5
Grain	Casle Malting Whisky	3 kg (38.2%)	85 %	4
Grain	Fawcett - Chocolate	0.6 kg (7.6%)	71 %	1100
Grain	Płatki owsiane	0.5 kg (6.4%)	60 %	3
Grain	Strzegom Karmel 300	0.5 kg (6.4%)	70 %	299
Grain	Weyermann - Jęczmień palony	0.25 kg (3.2%)	55 %	1110

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	30 g	60 min	12.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	30 ml	Fermentum Mobile
Starter				