

# Boris

- Gravity **28.3 BLG**
- ABV ---
- IBU **93**
- SRM **78.8**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **80 min**
- Evaporation rate **5 %/h**
- Boil size **21.1 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **28.6 liter(s)**
- Total mash volume **39.2 liter(s)**

## Steps

- Temp **64 C**, Time **70 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **28.6 liter(s)** of strike water to **72.1C**
- Add grains
- Keep mash **70 min** at **64C**
- Keep mash **5 min** at **78C**
- Sparge using **3.1 liter(s)** of **76C** water or to achieve **21.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	5 kg (47.2%)	81 %	6
Grain	Heidelberg	2.5 kg (23.6%)	80.5 %	2
Grain	Pszeniczny	0.8 kg (7.6%)	85 %	4
Grain	Special B Malt	0.5 kg (4.7%)	65.2 %	315
Grain	Oats, Flaked	0.5 kg (4.7%)	80 %	2
Grain	Weyermann - Carafa I	0.48 kg (4.5%)	70 %	690
Grain	Extra black	0.44 kg (4.2%)	65 %	1400
Grain	Simpsons - Crystal Rye	0.37 kg (3.5%)	73 %	177

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	69 g	60 min	13.5 %
Boil	ADHA 484	20 g	30 min	10.6 %
Boil	Citra	20 g	25 min	13.5 %
Boil	ADHA 484	30 g	2 min	10.6 %

## Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
US-05	Ale	Dry	23 g	Mangrove Jack's

### **Extras**

<b>Type</b>	<b>Name</b>	<b>Amount</b>	<b>Use for</b>	<b>Time</b>
Flavor	Płatki Dębowe Francuskie, mocno przypiekane	50 g	Secondary	30 day(s)