

## (JM) MAD BORIS

---

- Gravity **27 BLG**
- ABV **12.9 %**
- IBU **59**
- SRM **73.4**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.6 liter(s)**

### Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.28 liter(s) / kg**
- Mash size **45.9 liter(s)**
- Total mash volume **59.9 liter(s)**

### Steps

- Temp **66 C**, Time **90 min**
- Temp **75 C**, Time **10 min**

### Mash step by step

- Heat up **45.9 liter(s)** of strike water to **73C**
- Add grains
- Keep mash **90 min** at **66C**
- Keep mash **10 min** at **75C**
- Sparge using **-4.3 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	11 kg (78.6%)	80 %	6
Grain	Simpsons - Chocolate Malt	1.5 kg (10.7%)	70 %	1150
Grain	Simpsons - DRC® Double Roasted Crystal	0.5 kg (3.6%)	70 %	300
Grain	Simpsons - Brown Malt	0.5 kg (3.6%)	70 %	510
Grain	Simpsons - Amber Malt	0.5 kg (3.6%)	70 %	60

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	100 g	30 min	12.9 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Voss kveik	Ale	Slant	20 ml	House culture