

## 99. Norwegian Porter, 100, American Porter, 101. British Porter

- Gravity **22 BLG**
- ABV **9.9 %**
- IBU **47**
- SRM **33.6**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **10 %**
- Size with trub loss **44 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **52.8 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **30.6 liter(s)**
- Total mash volume **45.9 liter(s)**

### Steps

- Temp **62 C**, Time **40 min**
- Temp **78 C**, Time **20 min**

### Mash step by step

- Heat up **30.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **78C**
- Sparge using **37.5 liter(s)** of **76C** water or to achieve **52.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	10 kg (61.3%)	80 %	7
Grain	Barley, Flaked	1 kg (6.1%)	70 %	4
Grain	Munich Malt	2 kg (12.3%)	80 %	18
Grain	Aromatic Malt	0.5 kg (3.1%)	78 %	51
Grain	Special B Malt	0.6 kg (3.7%)	65.2 %	315
Grain	Weyermann - Chocolate Wheat	0.6 kg (3.7%)	74 %	788
Grain	Weyermann - Dehusked Carafa III	0.6 kg (3.7%)	70 %	1024
Sugar	Cukier	1 kg (6.1%)	100 %	1

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	100 g	60 min	11 %
Boil	Tradition	100 g	10 min	5.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Oslo Kveik	Ale	Slant	1000 ml	Bootleg

WLP023 - Burton Ale Yeast	Ale	Slant	2000 ml	White Labs
US05	Ale	Dry	11 g	White Labs