

Harry Porter

- Gravity **20.5 BLG**
- ABV **9 %**
- IBU **31**
- SRM **25.9**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **80 min**
- Evaporation rate **15 %/h**
- Boil size **30.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **31.9 liter(s)**
- Total mash volume **41 liter(s)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **65 C**, Time **60 min**
- Temp **76 C**, Time **15 min**

Mash step by step

- Heat up **31.9 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **76C**
- Sparge using **7.4 liter(s)** of **76C** water or to achieve **30.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Vienna Malt	4 kg (44%)	77 %	9
Grain	Briess - Munich Malt 10L	3 kg (33%)	77 %	20
Grain	Briess - Munich Malt 20L	1 kg (11%)	74 %	39
Grain	Briess - Chocolate Malt	0.3 kg (3.3%)	60 %	690
Grain	Caraaroma	0.3 kg (3.3%)	78 %	400
Grain	Caramunich® typ I	0.5 kg (5.5%)	73 %	80

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Premiant	60 g	60 min	5.9 %
Boil	Premiant	60 g	5 min	5.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Wyeast - Bohemian Lager 2124	Lager	Slant	250 ml	Wyeast Labs
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Extras

Type	Name	Amount	Use for	Time
Water Agent	Lactic acid 80 %	4.8 g	Mash	50 min
Water Agent	Calcium chloried flake	9.3 g	Mash	80 min
Water Agent	Calcium sulphate	8.3 g	Mash	80 min