

X-Mass Porter

- Gravity **23.1 BLG**
- ABV **10.5 %**
- IBU **33**
- SRM **28.5**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **33.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **34.9 liter(s)**
- Total mash volume **46.6 liter(s)**

Steps

- Temp **64 C**, Time **25 min**
- Temp **71 C**, Time **50 min**

Mash step by step

- Heat up **34.9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **25 min** at **64C**
- Keep mash **50 min** at **71C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **33.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	2.84 kg (24.4%)	79 %	10
Grain	Strzegom Monachijski typ II	2.36 kg (20.3%)	79 %	22
Grain	Strzegom Pilzneński	2.36 kg (20.3%)	80 %	4
Grain	Barley, Flaked	1.35 kg (11.6%)	70 %	4
Grain	Caramunich	0.47 kg (4.1%)	73 %	115
Grain	Carahell	0.47 kg (4.1%)	77 %	26
Grain	Carafa II	0.14 kg (1.2%)	70 %	812
Grain	Brown Malt (British Chocolate)	0.68 kg (5.8%)	70 %	128
Grain	special X	0.54 kg (4.6%)	70 %	350
Grain	czekoladowy	0.09 kg (0.8%)	70 %	1200
Grain	Wędzony bukiem Viking Malt	0.34 kg (2.9%)	82 %	10

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	67.57 g	60 min	3.5 %
Boil	Marynka	33.78 g	60 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP920 - Old Bavarian Lager Yeast	Lager	Liquid	135.14 ml	White Labs