

po prostu porter

- Gravity **18.9 BLG**
- ABV **8.2 %**
- IBU **35**
- SRM **11.2**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **21.9 liter(s)**
- Total mash volume **30 liter(s)**

Steps

- Temp **52 C**, Time **20 min**
- Temp **62 C**, Time **20 min**
- Temp **68 C**, Time **15 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **21.9 liter(s)** of strike water to **57.9C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **20 min** at **62C**
- Keep mash **15 min** at **68C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	6.3 kg (77.8%)	80 %	4
Grain	Strzegom Monachijski typ I	1.2 kg (14.8%)	79 %	16
Grain	Karmelowy żytni Strzegom	0.6 kg (7.4%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	40 g	60 min	10 %
Aroma (end of boil)	Marynka	15 g	5 min	8.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager S-23	Lager	Dry	12 g	Fermentis Division of S.I.Lesaffre