Porter Bałtycki v1.1

- Gravity **26.8 BLG**
- ABV **12.7 %**
- IBU **25**
- SRM **55.1**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **1 %**
- Size with trub loss **20.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **22.3 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **1.5 liter(s) / kg**
- Mash size **17.9 liter(s)**
- Total mash volume **29.8 liter(s)**

Steps

- Temp **64 C**, Time **20 min**
- Temp **68 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **17.9 liter(s)** of strike water to **78.6C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **30 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **22.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	4 kg *(32.3%)*	79 %	10
Grain	Strzegom Monachijski typ II	2.5 kg *(20.2%)*	79 %	22
Grain	Strzegom Pilzneński	3 kg *(24.2%)*	80 %	4
Grain	Strzegom Karmel 150	0.5 kg *(4%)*	75 %	150
Grain	Caraaroma	0.5 kg *(4%)*	78 %	400
Grain	Abbey Castle	0.3 kg *(2.4%)*	80 %	45
Grain	Strzegom Czekoladowy ciemny	0.2 kg *(1.6%)*	2 %	1200
Grain	Jęczmień palony	0.6 kg *(4.8%)*	5 %	985
Grain	Weyermann Caramunich 3	0.3 kg *(2.4%)*	76 %	150
Liquid Extract	Dark Liquid Extract	0.5 kg *(4%)*	78 %	35

Hops

Use for	Name	Amount	Time	Alpha acid

Boil	Marynka	30 g	60 min	10 %
Boil	Lublin (Lubelski)	15 g	30 min	4 %
Aroma (end of boil)	Lublin (Lubelski)	15 g	10 min	4 %