

# imperial porter WARKA 15

- Gravity **22.7 BLG**
- ABV **10.3 %**
- IBU **26**
- SRM **35.9**
- Style **Baltic Porter**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **27.7 liter(s)**
- Total mash volume **36.9 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **27.7 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **7.2 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Wędzony bukiem Viking Malt	0.45 kg (4.6%)	82 %	10
Grain	Strzegom Monachijski typ I	2 kg (20.4%)	79 %	16
Grain	Viking Pale Ale malt	2.3 kg (23.4%)	80 %	5
Grain	Strzegom Monachijski typ II	0.77 kg (7.8%)	79 %	22
Grain	Czekoladowy	0.25 kg (2.5%)	60 %	1000
Grain	Carafa III	0.2 kg (2%)	70 %	1034
Grain	Czekoladowy	0.25 kg (2.5%)	60 %	788
Liquid Extract	WES ekstrakt słodowy jasny	0.3 kg (3.1%)	80 %	45
Grain	Pilzneński	3 kg (30.5%)	81 %	4
Sugar	Milk Sugar (Lactose)	0.3 kg (3.1%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	30 g	60 min	11.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
safelager s-189	Lager	Slant	100 ml	---

## Notes

- warzone 29.03  
BLG początkowe 23 blg, 17 l brzezki  
gęstwa drożdżowa dodana w postaci starteru ok 14 blg, łącznie 0,6 l  
*Mar 31, 2020, 12:15 PM*