

# imperial salty rye porter + KAKAOWIEC + Płatki dębowe z rumu

- Gravity **25.1 BLG**
- ABV **11.7 %**
- IBU **44**
- SRM **37**
- Style **Robust Porter**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **24.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

## Steps

- Temp **67 C**, Time **75 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **75 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **10.8 liter(s)** of **76C** water or to achieve **24.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (34.5%)	80 %	5
Grain	Strzegom Monachijski typ II	1 kg (11.5%)	79 %	22
Grain	Żytni	1.5 kg (17.2%)	85 %	8
Grain	Karmelowy żytni Strzegom	0.7 kg (8%)	75 %	150
Grain	Strzegom Czekoladowy jasny	0.5 kg (5.7%)	68 %	400
Grain	Carafa III	0.3 kg (3.4%)	70 %	1300
Liquid Extract	WES ekstrakt słodowy jasny	1.7 kg (19.5%)	80 %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Admiral	35 g	60 min	15.7 %
Boil	Fuggles	25 g	15 min	5.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	300 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Other	łuska ryżowa	300 g	Mash	10 min
Flavor	ziarna kakaowca	150 g	Secondary	10 day(s)
Flavor	sól himalajska	20 g	Boil	5 min