

# Kruczy Wrzask

- Gravity **23.3 BLG**
- ABV **10.7 %**
- IBU **15**
- SRM **48.6**
- 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 **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30 liter(s)**
- Total mash volume **40 liter(s)**

## Steps

- Temp **68 C**, Time **90 min**

## Mash step by step

- Heat up **30 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Sparge using **5.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	4 kg (40%)	79 %	10
Grain	Strzegom Monachijski typ II	2 kg (20%)	79 %	22
Grain	Strzegom Karmel 300	0.5 kg (5%)	70 %	299
Grain	Strzegom Czekoladowy jasny	0.5 kg (5%)	68 %	400
Grain	Strzegom Czekoladowy ciemny	0.5 kg (5%)	68 %	1200
Grain	Słód Caramunich Typ II Weyermann	0.5 kg (5%)	73 %	120
Grain	Płatki owsiane	1 kg (10%)	85 %	3
Grain	Słód Cookie (bursztynowy)	1 kg (10%)	70 %	70

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Boil	Lublin (Lubelski)	10 g	10 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Wyeast - Bohemian Lager	Lager	Dry	20 g	Wyeast Labs
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