

# Karwia na Kickstarter

- Gravity **19.8 BLG**
- ABV ---
- IBU **49**
- SRM **37.2**
- Style **Baltic Porter**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **7 %**
- Size with trub loss **12.8 liter(s)**
- Boil time **90 min**
- Evaporation rate **11 %/h**
- Boil size **16.3 liter(s)**

## Mash information

- Mash efficiency **62 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.7 liter(s)**
- Total mash volume **22.3 liter(s)**

## Steps

- Temp **69 C**, Time **70 min**

## Mash step by step

- Heat up **16.7 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **70 min** at **69C**
- Sparge using **5.2 liter(s)** of **76C** water or to achieve **16.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	2 kg (35.8%)	79 %	10
Grain	Strzegom Monachijski typ I	2 kg (35.8%)	79 %	16
Grain	Strzegom Pilzneński	1 kg (17.9%)	80 %	4
Grain	Strzegom Karmel 600	0.5 kg (9%)	68 %	601
Grain	Fawcett - Pszeniczny Czekoladowy	0.07 kg (1.3%)	73 %	1001
Grain	Jęczmień palony	0.01 kg (0.2%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	25 g	60 min	11.2 %
Aroma (end of boil)	Hallertau	25 g	15 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
lager	Lager	Dry	30.34 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Spice	Płatki dębowe palone	50 g	Secondary	20 day(s)
Flavor	espresso	275.86 g	Boil	30 min