

# 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    |