

# Bułgarska Parówka

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **45**
- SRM **31.3**
- Style **Robust Porter**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22 liter(s)**
- Total mash volume **29.4 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **22 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

| Type  | Name                           | Amount         | Yield | EBC  |
|-------|--------------------------------|----------------|-------|------|
| Grain | Żytni                          | 1 kg (13.6%)   | 85 %  | 8    |
| Grain | Strzegom<br>Czekoladowy ciemny | 0.2 kg (2.7%)  | 68 %  | 1200 |
| Grain | Special X                      | 1 kg (13.6%)   | 70 %  | 350  |
| Grain | Strzegom Karmel<br>150         | 0.55 kg (7.5%) | 75 %  | 150  |
| Grain | Płatki żytnie                  | 0.6 kg (8.2%)  | 85 %  | 3    |
| Grain | Viking Pale Ale malt           | 4 kg (54.4%)   | 80 %  | 5    |

## Hops

| Use for             | Name     | Amount | Time   | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil                | lunga    | 11 g   | 60 min | 11 %       |
| Boil                | Chinook  | 15 g   | 60 min | 11.1 %     |
| Boil                | Columbus | 15 g   | 60 min | 13.7 %     |
| Aroma (end of boil) | Columbus | 15 g   | 5 min  | 13.7 %     |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safbrew S-33 | Ale  | Dry  | 11.5 g | Safbrew    |