

## Stout warka 24

- Gravity **19.6 BLG**
- ABV ---
- IBU **36**
- SRM **69.9**
- Style **Foreign Extra Stout**

### 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 **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **28 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **20 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

| Type  | Name                             | Amount         | Yield | EBC  |
|-------|----------------------------------|----------------|-------|------|
| Grain | Briess - Pale Ale Malt           | 4 kg (49.9%)   | 80 %  | 7    |
| Grain | Pszeniczny                       | 1 kg (12.5%)   | 85 %  | 4    |
| Grain | Caramel/Crystal Malt - 10L       | 0.66 kg (8.2%) | 75 %  | 20   |
| Grain | Caraaroma                        | 0.34 kg (4.2%) | 78 %  | 400  |
| Grain | Strzegom Karmel 150              | 0.5 kg (6.2%)  | 75 %  | 150  |
| Grain | Brown Malt (British Chocolate)   | 0.21 kg (2.6%) | 70 %  | 128  |
| Grain | Briess - Chocolate Malt          | 0.4 kg (5%)    | 60 %  | 690  |
| Grain | Carafa III                       | 0.2 kg (2.5%)  | 70 %  | 1034 |
| Grain | Carafa II                        | 0.2 kg (2.5%)  | 70 %  | 812  |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.2 kg (2.5%)  | 73 %  | 1001 |
| Grain | Płatki owsiane                   | 0.3 kg (3.7%)  | 85 %  | 3    |

### Hops

| Use for | Name   | Amount | Time   | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil    | Magnum | 25 g   | 60 min | 13.5 %     |

|      |         |      |        |       |
|------|---------|------|--------|-------|
| Boil | Sybilla | 25 g | 20 min | 3.5 % |
|------|---------|------|--------|-------|

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11 g   | Safale     |