

# tropical stout wawer 100 l

- Gravity **15.9 BLG**
- ABV ---
- IBU **46**
- SRM **64.4**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **100 liter(s)**
- Trub loss **5 %**
- Size with trub loss **105 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **126.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **92.2 liter(s)**
- Total mash volume **122.9 liter(s)**

## Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **92.2 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **65 liter(s)** of **76C** water or to achieve **126.5 liter(s)** of wort

## Fermentables

| Type    | Name                          | Amount         | Yield | EBC  |
|---------|-------------------------------|----------------|-------|------|
| Grain   | Pale Malt (2 Row) Bel         | 16 kg (46.1%)  | 80 %  | 6    |
| Grain   | Weyermann - Carared           | 4 kg (11.5%)   | 75 %  | 45   |
| Grain   | Weyermann - Carapils          | 2 kg (5.8%)    | 78 %  | 4    |
| Grain   | weyermann - caramunich typ II | 2 kg (5.8%)    | 75 %  | 125  |
| Grain   | Weyermann - Carafa I          | 2 kg (5.8%)    | 70 %  | 690  |
| Grain   | Fawcett - Pale Chocolate      | 4 kg (11.5%)   | 71 %  | 600  |
| Grain   | Strzegom Czekoladowy ciemny   | 0.32 kg (0.9%) | 68 %  | 1200 |
| Grain   | żyto palone                   | 0.4 kg (1.2%)  | 1 %   | 750  |
| Adjunct | Płatki owsiane                | 4 kg (11.5%)   | 1 %   | 3    |

## Hops

| Use for | Name   | Amount | Time   | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil    | Mosaic | 80 g   | 60 min | 10 %       |

|                     |         |      |        |      |
|---------------------|---------|------|--------|------|
| Boil                | Chinook | 80 g | 60 min | 13 % |
| Aroma (end of boil) | Mosaic  | 40 g | 10 min | 10 % |
| Aroma (end of boil) | Chinook | 40 g | 10 min | 13 % |

### Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 46 g   | Fermentis  |

### Extras

| Type   | Name                           | Amount | Use for | Time   |
|--------|--------------------------------|--------|---------|--------|
| Flavor | korzeń lukrecji                | 80 g   | Boil    | 20 min |
| Flavor | owoce kandyzowane tropical mix | 800 g  | Boil    | 20 min |