

# Stout z orzechami laskowymi

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **34**
- SRM **34.6**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **30 %/h**
- Boil size **24.4 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **24.8 liter(s)**

## Steps

- Temp **67 C**, Time **75 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **18.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **75 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **12 liter(s)** of **76C** water or to achieve **24.4 liter(s)** of wort

## Fermentables

| Type  | Name                      | Amount         | Yield | EBC  |
|-------|---------------------------|----------------|-------|------|
| Grain | Weyermann - Pale Ale Malt | 5.4 kg (87.1%) | 85 %  | 7    |
| Grain | Fawcett - Pale Chocolate  | 0.3 kg (4.8%)  | 71 %  | 600  |
| Grain | Carafa III                | 0.2 kg (3.2%)  | 70 %  | 1300 |
| Grain | Żytni                     | 0.2 kg (3.2%)  | 85 %  | 8    |
| Grain | Jęczmień palony           | 0.1 kg (1.6%)  | 55 %  | 985  |

## Hops

| Use for | Name  | Amount | Time   | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil    | lunga | 25 g   | 60 min | 12 %       |

## Yeasts

| Name  | Type | Form  | Amount | Laboratory |
|-------|------|-------|--------|------------|
| US-05 | Ale  | Slant | 150 ml | ---        |

## Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|        |                 |       |           |          |
|--------|-----------------|-------|-----------|----------|
| Flavor | Orzechy laskowe | 500 g | Secondary | 3 day(s) |
|--------|-----------------|-------|-----------|----------|