

# Świąteczny czarny płyn 1

- Gravity **16.6 BLG**
- ABV ---
- IBU **24**
- SRM **42**
- Style **Oatmeal 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 **3.5 liter(s) / kg**
- Mash size **25.6 liter(s)**
- Total mash volume **32.9 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **25.6 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **30 min** at **72C**
- Sparge using **7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                             | Amount         | Yield | EBC  |
|-------|----------------------------------|----------------|-------|------|
| Grain | Strzegom Pszeniczny              | 2 kg (27.3%)   | 81 %  | 6    |
| Grain | Viking Pale Ale malt             | 2 kg (27.3%)   | 80 %  | 5    |
| Grain | Jęczmień palony                  | 0.07 kg (1%)   | 55 %  | 985  |
| Grain | Monachijski                      | 1 kg (13.7%)   | 80 %  | 16   |
| Grain | Strzegom Wiedeński               | 1 kg (13.7%)   | 79 %  | 10   |
| Grain | Strzegom pszenica prażona        | 0.25 kg (3.4%) | 70 %  | 1000 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.25 kg (3.4%) | 73 %  | 1001 |
| Grain | czekoladowy żytni                | 0.25 kg (3.4%) | 75 %  | 1000 |
| Grain | karmelowy ciemny                 | 0.5 kg (6.8%)  | 75 %  | 150  |

## Hops

| Use for | Name     | Amount | Time   | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil    | Magnum   | 15 g   | 60 min | 13.5 %     |
| Boil    | puławski | 15 g   | 10 min | 8.9 %      |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|       |     |     |        |     |
|-------|-----|-----|--------|-----|
| US-05 | Ale | Dry | 11.5 g | --- |
|-------|-----|-----|--------|-----|

### Extras

| Type  | Name               | Amount | Use for   | Time     |
|-------|--------------------|--------|-----------|----------|
| Spice | kardamon           | 3 g    | Boil      | 5 min    |
| Spice | anyż               | 5 g    | Boil      | 5 min    |
| Spice | laska cynamonu     | 2 g    | Secondary | 7 day(s) |
| Spice | laska wanilii      | 2 g    | Secondary | 7 day(s) |
| Spice | goździki           | 5 g    | Boil      | 5 min    |
| Spice | curacao            | 17 g   | Boil      | 5 min    |
| Spice | gałka muszkatałowa | 3 g    | Boil      | 5 min    |