

# Piwo na Boże Narodzenie ciemne

- Gravity **20.5 BLG**
- ABV **9 %**
- IBU **29**
- SRM **17.3**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **14.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.2 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.25 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **24.7 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **0 min**

## Mash step by step

- Heat up **18.9 liter(s)** of strike water to **74.2C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **76C**
- Sparge using **6.7 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

## Fermentables

| Type  | Name                      | Amount         | Yield | EBC |
|-------|---------------------------|----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 5 kg (85.9%)   | 85 %  | 7   |
| Grain | Carabelge                 | 0.3 kg (5.2%)  | 80 %  | 30  |
| Grain | Caramunich® typ I         | 0.2 kg (3.4%)  | 73 %  | 80  |
| Grain | Płatki owsiane            | 0.2 kg (3.4%)  | 60 %  | 3   |
| Grain | Jęczmień palony           | 0.12 kg (2.1%) | 55 %  | 985 |

## Hops

| Use for | Name            | Amount | Time   | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil    | Saaz            | 75 g   | 50 min | 2.95 %     |
| Boil    | Styrian Golding | 30 g   | 15 min | 3.4 %      |

## Yeasts

| Name           | Type | Form | Amount | Laboratory |
|----------------|------|------|--------|------------|
| Safbrew BE-256 | Ale  | Dry  | 11.5 g | Fermentis  |

## Extras

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

|        |                            |       |      |        |
|--------|----------------------------|-------|------|--------|
| Flavor | Skórka słodkiej pomarańczy | 17 g  | Boil | 15 min |
| Spice  | Kolendra                   | 5 g   | Boil | 15 min |
| Spice  | Cynamon cięty              | 3.5 g | Boil | 15 min |
| Spice  | Imbir cięty                | 2.2 g | Boil | 15 min |