

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 |