

Świąteczne Ciemne

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **45**
- SRM **25.6**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **14.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.6 liter(s)**
- Total mash volume **12.8 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **5 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **9.6 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **5 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **8 liter(s)** of **76C** water or to achieve **14.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------|----------------|-------|-----|
| Grain | Viking Pilsner malt | 1.7 kg (53.1%) | 100 % | 4 |
| Grain | Wędzony bukiem Viking Malt | 0.3 kg (9.4%) | 100 % | 10 |
| Grain | Viking Malt Wędzony Jabłonią | 0.3 kg (9.4%) | 100 % | 10 |
| Grain | Viking Malt karmelowy żytni | 0.3 kg (9.4%) | 100 % | 150 |
| Grain | Viking Malt karmelowy 150 | 0.3 kg (9.4%) | 100 % | 150 |
| Grain | Castle Cafe | 0.3 kg (9.4%) | 100 % | 480 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | Comet | 20 g | 60 min | 8.3 % |
| Boil | Comet | 10 g | 20 min | 8.3 % |
| Boil | Fantasia | 10 g | 20 min | 4.3 % |
| Boil | Fantasia | 20 g | 11 min | 4.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|-------------|-------------|---------------|-------------------|
| SafBrew t-58 | Ale | Dry | 11.5 g | SafBrew |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-------------|---------------|----------------|-------------|
| Spice | Cynamon | 20 g | Boil | 20 min |