

Świąteczne Ale Ciemne

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **33**
- SRM **25.8**
- Style **Christmas/Winter Specialty Spiced Beer**

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 **75 %**
- Liquor-to-grist ratio **2.55 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **23.6 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **17 liter(s)** of strike water to **73.8C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---|----------------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 3 kg (45.1%) | 80 % | 5 |
| Grain | Pilznieński (mam) | 2 kg (30.1%) | 81 % | 4 |
| Grain | Strzegom Monachijski typ I | 0.35 kg (5.3%) | 79 % | 16 |
| Grain | Karmelowy Jasny 30EBC | 0.3 kg (4.5%) | 75 % | 30 |
| Grain | Strzegom Karmel 600 | 0.2 kg (3%) | 68 % | 601 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.3 kg (4.5%) | 73 % | 1001 |
| 50gr od początku zacierania 50gr po 60 min | | | | |
| Grain | Płatki owsiane | 0.5 kg (7.5%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Magnum | 20 g | 60 min | 12 % |
| Boil | Lublin (Lubelski) | 20 g | 60 min | 4 % |

| | | | | |
|------|-------------------|------|--------|-----|
| Boil | Lublin (Lubelski) | 30 g | 10 min | 3 % |
|------|-------------------|------|--------|-----|

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------|------|------|--------|------------|
| Fermentis US-04 | Ale | Dry | 22 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------------------------|--------|---------|--------|
| Flavor | Laktoza | 250 g | Boil | 5 min |
| Spice | Imbir świeży | 30 g | Boil | 10 min |
| Spice | Cynamon mielony | 30 g | Boil | 10 min |
| Spice | Kardamon mielony (1 łyżeczka) | 4 g | Boil | 10 min |
| Spice | Gałka muskatołowa (1 łyżeczka) | 4 g | Boil | 10 min |
| Spice | Anyż | 5 g | Boil | 10 min |
| Spice | Goździki 5szt. | 2 g | Boil | 10 min |
| Spice | Przyprawa do pierników | 10 g | Boil | 10 min |
| Spice | Skórka z dwóch pomarańczy | 40 g | Boil | 10 min |
| Spice | Miód gryczany | 250 g | Boil | 10 min |
| Spice | Miód wielokwiatowy | 250 g | Boil | 10 min |