

Piernikowa Doris

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **22**
- SRM **27**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

Steps

- Temp **69 C**, Time **60 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **10.5 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **15 min** at **78C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------------|-----------------|-------|-----|
| Grain | Viking Pale Ale malt | 2 kg (53.4%) | 80 % | 5 |
| Grain | Strzegom Monachijski typ II | 0.7 kg (18.7%) | 79 % | 22 |
| Grain | Simpsons Brown Malt | 0.31 kg (8.3%) | 69 % | 500 |
| Grain | Płatki żytnie | 0.25 kg (6.7%) | 60 % | 4 |
| Sugar | Miód Gryczany (Buckwheat Honey) | 0.2 kg (5.3%) | 70 % | 40 |
| Grain | Bestmalz Caramel Hell | 0.15 kg (4%) | 80 % | 30 |
| Grain | Jęczmień palony | 0.1 kg (2.7%) | 55 % | 985 |
| Sugar | cukier muscovado | 0.034 kg (0.9%) | 100 % | 60 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|--------|------------|
| Boil | Magnat | 5 g | 30 min | 14 % |
| Aroma (end of boil) | Magnat | 30 g | 5 min | 14 % |

Yeasts

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

| | | | | |
|--------------------------------|-----|-----|-----|-----------------|
| Mangrove Jack's M15 Empire Ale | Ale | Dry | 5 g | Mangrove Jack's |
|--------------------------------|-----|-----|-----|-----------------|

Extras

| Type | Name | Amount | Use for | Time |
|-------------|------------------------------|--------|---------|--------|
| Flavor | przyprawa do piernika krukam | 20 g | Boil | 30 min |
| Flavor | cynamon | 6 g | Boil | 30 min |
| Flavor | imbir świeży | 4 g | Boil | 30 min |
| Flavor | goździki | 2 g | Boil | 30 min |
| Flavor | ziele angielskie | 2 g | Boil | 30 min |
| Flavor | gałka muszkatałowa | 1 g | Boil | 30 min |
| Flavor | kardamon | 1 g | Boil | 30 min |
| Water Agent | kwas mlekowy 80% | 3 g | Mash | 75 min |
| Water Agent | chlorek wapnia 33% | 4.5 g | Mash | 75 min |

Notes

- Cukier i miód dodane w 30 minucie gotowania.
Nov 7, 2021, 2:34 PM