

# Ale Spierniczone

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **23**
- SRM **20.6**
- 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.3 liter(s)**
- Total mash volume **15 liter(s)**

## Steps

- Temp **68 C**, Time **30 min**
- Temp **70 C**, Time **30 min**
- Temp **76 C**, Time **0 min**

## Mash step by step

- Heat up **11.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **30 min** at **68C**
- Keep mash **30 min** at **70C**
- Keep mash **0 min** at **76C**
- Sparge using **7.7 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 (53.3%)   | 80 %  | 5    |
| Grain | Strzegom Pilzneński                 | 1 kg (26.7%)   | 80 %  | 4    |
| Grain | Płatki owsiane                      | 0.5 kg (13.3%) | 85 %  | 3    |
| Grain | Słód Caramunich<br>Typ II Weyermann | 0.1 kg (2.7%)  | 73 %  | 120  |
| Grain | Jęczmień palony                     | 0.05 kg (1.3%) | 55 %  | 985  |
| Grain | Strzegom<br>Czekoladowy 1200        | 0.1 kg (2.7%)  | 68 %  | 1202 |

## Hops

| Use for | Name       | Amount | Time   | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil    | Challenger | 15 g   | 60 min | 7 %        |
| Boil    | Challenger | 15 g   | 10 min | 7 %        |

## Yeasts

| Name                               | Type | Form | Amount | Laboratory      |
|------------------------------------|------|------|--------|-----------------|
| Mangrove Jack's<br>-M15 Empire Ale | Ale  | Dry  | 10 g   | Mangrove Jack's |

## Extras

| Type   | Name                           | Amount | Use for | Time   |
|--------|--------------------------------|--------|---------|--------|
| Spice  | Cynamon Mielony                | 5 g    | Boil    | 15 min |
| Flavor | Śliwki suszone,<br>posiekane   | 70 g   | Boil    | 15 min |
| Flavor | Skórka z<br>Pomarańczy -3 szt  | 0 g    | Boil    | 15 min |
| Spice  | Goździki -10szt                | 0 g    | Boil    | 15 min |
| Spice  | Imbir                          | 2 g    | Boil    | 15 min |
| Spice  | Gałka Muszkatołowa             | 5 g    | Boil    | 15 min |
| Spice  | Cukier Wanilinowy              | 10 g   | Boil    | 15 min |
| Flavor | Żurawina suszona,<br>posiekana | 20 g   | Boil    | 15 min |
| Fining | Mech Irlandzki                 | 5 g    | Boil    | 10 min |