

merry=x-mas

- Gravity **13.1 BLG**
- ABV ---
- IBU **24**
- SRM **24.6**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.3 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

Steps

- Temp **68 C**, Time **70 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **15.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **20.1 liter(s)** of **76C** water or to achieve **30.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|-------------------------------|----------------|-------|-----|
| Grain | Briess - Pale Ale Malt | 3.5 kg (62.5%) | 80 % | 7 |
| Grain | Strzegom Karmel 150 | 0.5 kg (8.9%) | 75 % | 150 |
| Grain | Briess - Dark Chocolate Malt | 0.4 kg (7.1%) | 60 % | 827 |
| Grain | Karmelowy Pszeniczny Strzegom | 0.5 kg (8.9%) | 79 % | 130 |
| Grain | Oats, Flaked | 0.2 kg (3.6%) | 80 % | 2 |
| Liquid Extract | Miód wielokwiatowy | 0.5 kg (8.9%) | 70 % | 40 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil | Marynka | 25 g | 60 min | 8.8 % |
| Aroma (end of boil) | East Kent Goldings | 25 g | 10 min | 5.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|------|--------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Liquid | 100 ml | Fermentum Mobile |

Extras

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

| Type | Name | Amount | Use for | Time |
|--------|--------------------------------|--------|---------|--------|
| Spice | imbir - świeży plastry | 30 g | Boil | 60 min |
| Spice | cynamon - 2 laski (3?) | 20 g | Boil | 10 min |
| Spice | goździk - 6-8 ziaren | 0 g | Boil | 10 min |
| Spice | anyż - 1 gwiazdka (2?) | 0 g | Boil | 10 min |
| Spice | gałka muszkatołowa - pół kulki | 10 g | Boil | 10 min |
| Spice | kolendra | 3 g | Boil | 10 min |
| Spice | jałowiec | 3 g | Boil | 10 min |
| Spice | kardamon - 3 duże ziarna | 0 g | Boil | 10 min |
| Spice | ziele angielskie - 3 ziarna | 0 g | Boil | 10 min |
| Spice | pieprz czarny - 2 ziarna | 0 g | Boil | 10 min |
| Spice | skórka pomarańczy - 2 szt | 60 g | Boil | 10 min |
| Spice | skórka cytryny - 2 szt | 40 g | Boil | 10 min |
| Spice | curraçao | 20 g | Boil | 10 min |
| Fining | mech irlandzki | 5 g | Boil | 5 min |