

xmas ale piwoszarnia

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **14**
- SRM **26.6**
- 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 **87 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

Steps

- Temp **68 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **10.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|---------------|-------|-----|
| Grain | Viking Pilsner malt | 4 kg (66.7%) | 82 % | 4 |
| Grain | Viking Munich Malt | 1 kg (16.7%) | 78 % | 18 |
| Grain | Strzegom Karmel 150 | 0.2 kg (3.3%) | 75 % | 150 |
| Grain | Strzegom Karmel 300 | 0.2 kg (3.3%) | 70 % | 299 |
| Grain | Strzegom Czekoladowy 400 | 0.4 kg (6.7%) | 68 % | 400 |
| Grain | Barwiący | 0.2 kg (3.3%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 50 g | 30 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safbrew T-58 | Ale | Dry | 11 g | Fermentis |