

xmas pszenica

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **10**
- SRM **11.9**
- Style **Classic Rauchbier**

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 **78 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **21.8 liter(s)**

Steps

- Temp **44 C**, Time **20 min**
- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **3 min**

Mash step by step

- Heat up **17 liter(s)** of strike water to **47.4C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **3 min** at **78C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Weyermann - Pale Wheat Malt | 2.5 kg (51.5%) | 85 % | 5 |
| Grain | Weyermann - Pilsner Malt | 1.5 kg (30.9%) | 81 % | 5 |
| Grain | Weyermann - Carawheat | 0.25 kg (5.2%) | 77 % | 97 |
| Grain | Strzegom Monachijski typ II | 0.5 kg (10.3%) | 79 % | 22 |
| Grain | Chocolate Malt (UK) | 0.1 kg (2.1%) | 73 % | 887 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil | Tradition | 17 g | 60 min | 5.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------|-------|--------|--------|------------------|
| FM41 Gwoździe i Banany | Wheat | Liquid | 25 ml | Fermentum Mobile |