

pszenica nocą

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **15**
- SRM **17.2**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **44 C**, Time **20 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------------|---------------|--------|------|
| Grain | Pilzneński optima | 1 kg (18.2%) | 82.6 % | 4 |
| Grain | Monachijski Optima | 1 kg (18.2%) | 78.9 % | 18 |
| Grain | pszeniczny optima | 3 kg (54.5%) | 82.2 % | 4 |
| Grain | Carafa Special typ II | 0.1 kg (1.8%) | 65 % | 1150 |
| Grain | Karmelowy Jasny 20-30EBC optima | 0.3 kg (5.5%) | 75.9 % | 25 |
| Grain | Strzegom Czekoladowy ciemny | 0.1 kg (1.8%) | 68 % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 30 g | 60 min | 5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|-------|------|--------|------------|
| wb-06 | Wheat | Dry | 11.5 g | --- |