

Polskie Ale

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **24**
- SRM **8.5**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **80 min**
- Evaporation rate **8 %/h**
- Boil size **28.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **17.6 liter(s)**
- Total mash volume **23.1 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **17.6 liter(s)** of strike water to **74.3C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **28.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński | 4 kg (72.7%) | 80 % | 4 |
| Grain | Strzegom Monachijski typ I | 1 kg (18.2%) | 79 % | 16 |
| Grain | Karmelowy Pszeniczny Strzegom | 0.5 kg (9.1%) | 79 % | 130 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Marynka | 20 g | 60 min | 8.7 % |
| Boil | Lublin (Lubelski) | 20 g | 20 min | 4 % |
| Boil | Lublin (Lubelski) | 20 g | 5 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|------|--------|------------|
| Danstar - Nottingham | Ale | Dry | 11.2 g | Danstar |

Extras

| Type | Name | Amount | Use for | Time |
|--------|---------|--------|---------|--------|
| Fining | wirfloc | 3 g | Boil | 10 min |