

#3 Ale ale

- Gravity **12.2 BLG**
- ABV ---
- IBU **47**
- SRM ---

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **23.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **60 C**, Time **10 min**
- Temp **71 C**, Time **45 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **66.7C**
- Add grains
- Keep mash **10 min** at **60C**
- Keep mash **45 min** at **71C**
- Keep mash **10 min** at **75C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|-------------|-------|-----|
| Grain | Strzegom Pilzneński | 4 kg (100%) | --- % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|----------|------------|
| Boil | lunga | 20 g | 60 min | 11 % |
| Boil | Lublin (Lubelski) | 35 g | 30 min | 4 % |
| Aroma (end of boil) | Lublin (Lubelski) | 15 g | 10 min | 4 % |
| Dry Hop | Lublin (Lubelski) | 50 g | 4 day(s) | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------|------|------|--------|------------|
| Danstar - Windsor Ale | Ale | Dry | 10 g | --- |