

Altbier

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **28**
- SRM **12.4**
- Style **Old Ale**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **2 %**
- Size with trub loss **30.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **34 liter(s)**

Mash information

- Mash efficiency **86 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **26.6 liter(s)**
- Total mash volume **33.2 liter(s)**

Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **75 C**, Time **5 min**

Mash step by step

- Heat up **26.6 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **75C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **34 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------|----------------|-------|------|
| Grain | Strzegom Monachijski typ I | 4.5 kg (67.8%) | 79 % | 16 |
| Grain | Viking - pilzneński | 1 kg (15.1%) | 82 % | 4 |
| Grain | Weyermann - Caramunich Typ II | 0.6 kg (9%) | 73 % | 120 |
| Grain | Płatki owsiane błyskawiczne | 0.5 kg (7.5%) | 80 % | 3 |
| Grain | Weyermann - Carafa III | 0.04 kg (0.6%) | 70 % | 1400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------------------------------|--------|--------|------------|
| Boil | goryczkowy Marynka - szyszki własny zbiór | 35 g | 60 min | 10 % |
| Boil | aromatyczny Hallertau Hersbrucker | 25 g | 5 min | 2.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|-----------------------|-----|--------|---------|-----|
| FM42 Stare Nadreńskie | Ale | Liquid | 1000 ml | --- |
|-----------------------|-----|--------|---------|-----|