

Altbier (robiepiwo.pl)

- Gravity **12.4 BLG**
- ABV ---
- IBU **20**
- SRM **10.9**
- Style **Düsseldorf Altbier**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **25.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

Steps

- Temp **55 C**, Time **15 min**
- Temp **64 C**, Time **35 min**
- Temp **72 C**, Time **25 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **15 min** at **55C**
- Keep mash **35 min** at **64C**
- Keep mash **25 min** at **72C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **25.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Monachijski | 4.4 kg (97.8%) | 80 % | 16 |
| Grain | Strzegom Bursztynowy | 0.1 kg (2.2%) | 70 % | 49 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Hallertau Spalt Select | 40 g | 60 min | 3.4 % |
| Boil | Hallertau Spalt Select | 20 g | 10 min | 3.4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | Safale |