

Imperial AltBier

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **24**
- SRM **41.8**
- Style **Düsseldorf Altbier**

Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **20.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.5 liter(s)**
- Total mash volume **19.3 liter(s)**

Steps

- Temp **68 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **80 C**, Time **5 min**

Mash step by step

- Heat up **14.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **30 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **80C**
- Sparge using **10.5 liter(s)** of **76C** water or to achieve **20.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|-----------------|-------|------|
| Grain | Viking Pilsner malt | 2 kg (41.5%) | 82 % | 4 |
| Grain | Strzegom Monachijski typ II | 1.5 kg (31.1%) | 79 % | 22 |
| Grain | Strzegom Karmel 150 | 0.25 kg (5.2%) | 75 % | 150 |
| Grain | Strzegom Karmel 600 | 0.25 kg (5.2%) | 68 % | 601 |
| Grain | Caraaroma | 0.25 kg (5.2%) | 78 % | 400 |
| Grain | Strzegom Czekoladowy ciemny | 0.25 kg (5.2%) | 68 % | 1200 |
| Grain | Strzegom Czekoladowy jasny | 0.125 kg (2.6%) | 68 % | 400 |
| Grain | Biscuit Malt | 0.1 kg (2.1%) | 79 % | 45 |
| Grain | Weyermann - Carafa I | 0.1 kg (2.1%) | 70 % | 690 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | Perle | 15 g | 60 min | 5.5 % |

| | | | | |
|------|------------|-------|--------|-------|
| Boil | Marynka | 5 g | 60 min | 6.7 % |
| Boil | Challenger | 6.1 g | 60 min | 6.1 % |
| Boil | Sybilla | 15 g | 15 min | 5.5 % |

Yeasts

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