

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