

## #32 Alt

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **42**
- SRM **15.3**
- 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 **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.3 liter(s)**
- Total mash volume **21.7 liter(s)**

### Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **16.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	5 kg (92.2%)	79 %	16
Grain	Castlemalting - Cara Clair	0.25 kg (4.6%)	78 %	4
Grain	Special B Malt	0.1 kg (1.8%)	65.2 %	315
Grain	Strzegom Barwiący	0.075 kg (1.4%)	68 %	1300

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	60 g	60 min	5 %
Boil	Tradition	20 g	30 min	5 %
Boil	Tradition	20 g	10 min	5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa - Old German Altbier	Ale	Dry	10 g	---

### Extras

Type	Name	Amount	Use for	Time
Fining	whirlfloc	0.5 g	Boil	10 min