

# ALTBIER 14 BLG # 88

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **30**
- SRM **10.2**
- Style **Düsseldorf Altbier**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **10 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **25.4 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **19.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ II	4.18 kg (74%)	79 %	22
Grain	Pilzneński	1.05 kg (18.6%)	81 %	4
Grain	Strzegom Karmel 150	0.21 kg (3.7%)	75 %	150
Grain	Biscuit Malt	0.21 kg (3.7%)	79 %	45

## Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Hallertau Tradition	16 g	15 min	5 %
Aroma (end of boil)	Hallertau Tradition	20 g	5 min	5 %
Boil	Hallertau Tradition	53 g	60 min	5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
gozdawa	Ale	Dry	11.5 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
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Fining	mech	5.23 g	Boil	10 min
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