

# Dusseldorf ala Altbier II

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- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **39**
- SRM **14.1**
- Style **Düsseldorf Altbier**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **28.2 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.1 liter(s)**
- Total mash volume **27.1 liter(s)**

## Steps

- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **21.1 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **13.1 liter(s)** of **76C** water or to achieve **28.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ II	4 kg (66.3%)	79 %	22
Grain	Weyermann - Carared	1 kg (16.6%)	75 %	45
Grain	Weyermann - Melanoiden Malt	0.5 kg (8.3%)	81 %	53
Grain	Weyermann pszeniczny jasny	0.5 kg (8.3%)	80 %	6
Grain	Carafa III	0.03 kg (0.5%)	70 %	1034

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	60 min	11.6 %
Boil	Magnum	15 g	50 min	11.6 %
Boil	Tettnang	20 g	15 min	3.8 %
Aroma (end of boil)	Tettnang	10 g	5 min	3.8 %
Dry Hop	Tettnang	30 g	4 day(s)	4 %

## Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
FM52 Amerykański Sen	Ale	Slant	100 ml	Fermentum Mobile

### **Extras**

<b>Type</b>	<b>Name</b>	<b>Amount</b>	<b>Use for</b>	<b>Time</b>
Fining	mech irlandzki	2.5 g	Boil	10 min