

# Radschläger - Dusseldorf Altbier

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **40**
- SRM **14.1**
- 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 **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **17.5 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **78C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Vienna Malt	2 kg (40%)	81 %	8
Grain	Briess - Munich Malt 20L	2 kg (40%)	74 %	39
Grain	Słód Caramunich Typ II Weyermann	0.5 kg (10%)	73 %	120
Grain	Weyermann - Caraamber	0.5 kg (10%)	75 %	65

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau	60 g	60 min	5.4 %
Boil	Saphir	25 g	10 min	3.8 %
Whirlpool	Saphir	75 g	0 min	3.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM42 Stare Nadreńskie	Ale	Liquid	1500 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech Irlandzki	5 g	Boil	10 min

## Notes

- Fermentacja:  
Burzliwa (7-8 dni w 17-18 st. C)  
Cicha (7-8 dni w 17-18 st. C)

Butelkowanie:

Syrop cukrowy na refermentacje (110g cukru w 500 ml wody)

Dojrzwianie piwa:

3 tygodnie w temperaturze 16-18 st. C.

*Mar 8, 2017, 12:54 AM*