

# Banach-Tarski paradox - Dunkelweizen v.1.0

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- Gravity **12.1 BLG**
- ABV ---
- IBU **17**
- SRM **29.3**
- Style **Dunkelweizen**

## 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 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **52 C**, Time **15 min**
- Temp **62 C**, Time **30 min**
- Temp **68 C**, Time **30 min**

## Mash step by step

- Heat up **13.5 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **68C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pszeniczny	3 kg (66.7%)	81 %	6
Grain	Jęczmień palony	0.3 kg (6.7%)	55 %	985
Grain	Strzegom Pilzneński	1.2 kg (26.7%)	80 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau	30 g	60 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM41 Gwoździe i Banany	Wheat	Liquid	30 ml	Fermentum Mobile