

# projekt - Dunkelweizen #2 - Browar na Wyżynie

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **15**
- SRM **14.9**
- Style **Dunkelweizen**

## Batch size

- Expected quantity of finished beer **18.5 liter(s)**
- Trub loss **6 %**
- Size with trub loss **19.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **11 %/h**
- Boil size **23.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

## Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **14.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13.5 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	pszeniczny Viking Malt	2.5 kg (52.1%)	81 %	5
Grain	monachijski typ II Viking Malt	1.5 kg (31.3%)	78 %	24
Grain	red ale (melanoidynowy) Viking Malt	0.25 kg (5.2%)	75 %	80
Grain	pszeniczny karmelowy Viking Malt	0.25 kg (5.2%)	70 %	100
Grain	karmelowy 100 - Viking Malt	0.2 kg (4.2%)	75 %	100
Grain	karmelowy 600 - Viking Malt	0.1 kg (2.1%)	65 %	600

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle (DE) - granulac	15 g	60 min	8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Lallemand Danstar Munich Classic	Ale	Dry	11 g	---
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### Extras

Type	Name	Amount	Use for	Time
Water Agent	kwas mlekowy 80%	5 g	Mash	70 min
Water Agent	chlorek sodu	4 g	Mash	70 min
Water Agent	siarczan wapnia	1 g	Mash	70 min
Spice	rumianek saszetka x 2	3 g	Boil	5 min
Water Agent	woda demineralizowana	15000 g	Mash	70 min