

# Dunkelweizen Fm41 Browar Wyzerowana Jednostka

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **14**
- SRM **17**
- Style **Dunkelweizen**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **29.5 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **42 C**, Time **30 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **45 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **17.1 liter(s)** of strike water to **45.2C**
- Add grains
- Keep mash **30 min** at **42C**
- Keep mash **20 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **29.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	2.3 kg (46.9%)	85 %	4
Grain	Strzegom Monachijski typ II	1 kg (20.4%)	79 %	22
Grain	Pilzneński	1 kg (20.4%)	81 %	4
Grain	Strzegom Karmel 600	0.3 kg (6.1%)	68 %	601
Grain	Caraaroma	0.1 kg (2%)	78 %	400
Grain	Strzegom Karmel 150	0.2 kg (4.1%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	35 g	70 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM41 Gwoździe i Banany	Wheat	Slant	1000 ml	Fermentum Mobile