

# Hafe weizen w kociołku drożdże płynne fm 41 chmiel niemiecki

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **20**
- SRM **5.3**
- Style **Weizen/Weissbier**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **29.5 liter(s)**

## Mash information

- Mash efficiency **63 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **20.5 liter(s)**
- Total mash volume **26.7 liter(s)**

## Steps

- Temp **44 C**, Time **20 min**
- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **20.5 liter(s)** of strike water to **47.6C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **45 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **29.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2 kg (32.3%)	80 %	4
Grain	Pszeniczny	3 kg (48.4%)	85 %	4
Grain	Melanoiden Malt	0.6 kg (9.7%)	80 %	39
Grain	Monachijski	0.2 kg (3.2%)	80 %	16
Grain	Płatki owsiane	0.4 kg (6.5%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tettnang	30 g	60 min	4.7 %
Boil	Tettnang	30 g	15 min	4.7 %

## Yeasts

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