

# Ale na FM51

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- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **18**
- SRM **3**
- Style **Standard/Ordinary Bitter**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **30.9 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **5.9 liter(s) / kg**
- Mash size **24.8 liter(s)**
- Total mash volume **29 liter(s)**

## Steps

- Temp **68.5 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **24.8 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **90 min** at **68.5C**
- Keep mash **10 min** at **78C**
- Sparge using **10.3 liter(s)** of **76C** water or to achieve **30.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.66 kg (63.3%)	81 %	4
Grain	Viking Pale Ale malt	1.2 kg (28.6%)	80 %	5
Grain	Pszeniczny	0.34 kg (8.1%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	10 g	50 min	10.5 %
Boil	Magnum	10 g	15 min	10.5 %
Boil	Izabella	10 g	15 min	5.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM51 Grodzie Dębowe	Wheat	Slant	120 ml	Fermentum Mobile