

# Hvede guf

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **11**
- SRM **3.7**
- Style **Weizen/Weissbier**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **46 C**, Time **15 min**
- Temp **63 C**, Time **25 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **50.3C**
- Add grains
- Keep mash **15 min** at **46C**
- Keep mash **25 min** at **63C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Wheat Malt, White	3.1 kg (62%)	85 %	5
Grain	Pilsner (2 Row) Ger	1.9 kg (38%)	81 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Lublin (Lubelski)	25 g	60 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's -M15 Empire Ale	Ale	Dry	10 g	Mangrove Jack's