

# Helles

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **13**
- SRM **3.1**
- Style **Munich Helles**

## Batch size

- Expected quantity of finished beer **56 liter(s)**
- Trub loss **5 %**
- Size with trub loss **58.8 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **74.1 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **33 liter(s)**
- Total mash volume **44 liter(s)**

## Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **33 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **52.1 liter(s)** of **76C** water or to achieve **74.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	11 kg (100%)	80 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Tradition	30 g	60 min	6 %
Boil	Hallertau Tradition	40 g	15 min	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	30 g	Fermentis

## Notes

- 3 paczki W34/70 Gozdawa na połowę i US-05 na drugą część

Piwo na US-05 bardzo dobre  
Apr 9, 2023, 6:50 PM