

# SH Centennial

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **54**
- SRM **5**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **22.7 liter(s)**

## Steps

- Temp **63 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **2 min**

## Mash step by step

- Heat up **17.7 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **50 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **2 min** at **76C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	1.5 kg (29.7%)	81 %	4
Grain	Viking Pale Ale malt	2.5 kg (49.5%)	80 %	5
Grain	Pszeniczny	1 kg (19.8%)	85 %	4
Grain	Strzegom Karmel 300	0.05 kg (1%)	70 %	299

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	15 g	60 min	10.5 %
Aroma (end of boil)	Centennial	25 g	20 min	10.5 %
Aroma (end of boil)	Centennial	60 g	10 min	10.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis