

# SH GPA Hallertau Blanc

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **33**
- SRM **4.3**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **26.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **20.2 liter(s)**
- Total mash volume **25.6 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **20.2 liter(s)** of strike water to **69.9C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Pilzneński           | 4 kg (73.4%)   | 81 %  | 4   |
| Grain | Pszeniczny           | 1 kg (18.3%)   | 85 %  | 4   |
| Grain | Weyermann - Carapils | 0.25 kg (4.6%) | 78 %  | 4   |
| Grain | Abbey Castle         | 0.2 kg (3.7%)  | 80 %  | 45  |

## Hops

| Use for   | Name            | Amount | Time     | Alpha acid |
|-----------|-----------------|--------|----------|------------|
| Boil      | Hallertau Blanc | 50 g   | 20 min   | 11 %       |
| Boil      | Hallertau Blanc | 30 g   | 0 min    | 11 %       |
| Whirlpool | Hallertau Blanc | 50 g   | 20 min   | 11 %       |
| Dry Hop   | Hallertau Blanc | 70 g   | 3 day(s) | 11 %       |

## Yeasts

| Name                        | Type | Form   | Amount  | Laboratory       |
|-----------------------------|------|--------|---------|------------------|
| FM54 Gorączka Kalifornijska | Ale  | Liquid | 1000 ml | Fermentum Mobile |

## Extras

| Type        | Name        | Amount | Use for | Time   |
|-------------|-------------|--------|---------|--------|
| Water Agent | Gips        | 5 g    | Mash    | 60 min |
| Water Agent | Lactic Acid | 5 g    | Mash    | 60 min |
| Fining      | Whirlfloc   | 2.5 g  | Boil    | 10 min |