

# Altbier

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **32**
- SRM **8.3**
- Style **Northern German Altbier**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **32.2 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **14.2 liter(s)**
- Total mash volume **19.9 liter(s)**

## Steps

- Temp **66 C**, Time **35 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **14.2 liter(s)** of strike water to **75.2C**
- Add grains
- Keep mash **35 min** at **66C**
- Keep mash **30 min** at **72C**
- Sparge using **23.7 liter(s)** of **76C** water or to achieve **32.2 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Strzegom Monachijski typ I  | 2.3 kg (40.4%) | 79 %  | 16  |
| Grain | Pilzneński                  | 1.5 kg (26.3%) | 81 %  | 4   |
| Grain | Strzegom Monachijski typ II | 1.5 kg (26.3%) | 79 %  | 22  |
| Grain | Caramunich® typ I           | 0.3 kg (5.3%)  | 73 %  | 80  |
| Grain | Carared                     | 0.1 kg (1.8%)  | 75 %  | 39  |

## Hops

| Use for             | Name        | Amount | Time   | Alpha acid |
|---------------------|-------------|--------|--------|------------|
| Boil                | Magnum      | 25 g   | 60 min | 13.5 %     |
| Boil                | Puławski pl | 10 g   | 10 min | 7 %        |
| Aroma (end of boil) | pulaski     | 10 g   | 0 min  | 7 %        |

## Yeasts

| Name              | Type | Form  | Amount | Laboratory |
|-------------------|------|-------|--------|------------|
| fm 50 po crem ale | Ale  | Slant | 200 ml | ---        |