

# Archer

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- Gravity **8.3 BLG**
- ABV ---
- IBU **28**
- SRM **3.1**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **6.65 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **23 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **20 liter(s)** of strike water to **71.6C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **25 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **8.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                  | Amount      | Yield | EBC |
|-------|-----------------------|-------------|-------|-----|
| Grain | Weyermann - Grodziski | 3 kg (100%) | 80 %  | 4   |

## Hops

| Use for             | Name  | Amount | Time   | Alpha acid |
|---------------------|-------|--------|--------|------------|
| Boil                | Lomik | 30 g   | 60 min | 4.6 %      |
| Aroma (end of boil) | Lomik | 20 g   | 20 min | 4.6 %      |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safbrew S-33 | Ale  | Dry  | 11.5 g | Safbrew    |