

# Münchhausen

- Gravity **8.5 BLG**
- ABV **3.3 %**
- IBU **19**
- SRM **16.3**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.2 liter(s)**
- Total mash volume **15 liter(s)**

## Steps

- Temp **44 C**, Time **30 min**
- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

## Mash step by step

- Heat up **11.2 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **30 min** at **44C**
- Keep mash **60 min** at **62C**
- Keep mash **10 min** at **72C**
- Sparge using **20.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount         | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Briess - Pale Ale Malt | 3 kg (80.2%)   | 80 %  | 7   |
| Grain | Jęczmień palony        | 0.24 kg (6.4%) | 55 %  | 985 |
| Grain | Pszeniczny             | 0.5 kg (13.4%) | 85 %  | 4   |

## Hops

| Use for | Name  | Amount | Time   | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil    | Lomik | 35 g   | 60 min | 4.6 %      |

## Yeasts

| Name                       | Type | Form   | Amount | Laboratory       |
|----------------------------|------|--------|--------|------------------|
| FM10 O czym szumią wierzby | Ale  | Liquid | 200 ml | Fermentum Mobile |

## Extras

| Type  | Name | Amount | Use for   | Time      |
|-------|------|--------|-----------|-----------|
| Other | cydr | 5000 g | Secondary | 14 day(s) |