

# Lager górnej fermentacji

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **29**
- SRM **3.7**

## Batch size

- Expected quantity of finished beer **29 liter(s)**
- Trub loss **5 %**
- Size with trub loss **30.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **36.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.4 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **24.8 liter(s)**

## Steps

- Temp **62 C**, Time **45 min**
- Temp **67 C**, Time **20 min**

## Mash step by step

- Heat up **17.5 liter(s)** of strike water to **70.8C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **20 min** at **67C**
- Sparge using **26.5 liter(s)** of **76C** water or to achieve **36.7 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński  | 6.6 kg (90.4%) | 80 %  | 4   |
| Grain | Weyermann - Carapils | 0.7 kg (9.6%)  | 78 %  | 4   |

## Hops

| Use for | Name                  | Amount | Time   | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil    | Lublin (Lubelski)     | 40 g   | 50 min | 4 %        |
| Boil    | Saaz (Czech Republic) | 70 g   | 30 min | 4.5 %      |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
| us05 | Ale  | Dry  | 20 g   | ---        |

## Extras

| Type   | Name      | Amount | Use for | Time   |
|--------|-----------|--------|---------|--------|
| Fining | whirflock | 1 g    | Boil    | 10 min |