

# Brzozowy lager 2020

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- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **36**
- SRM **4.7**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **3 %**
- Size with trub loss **25.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **28.6 liter(s)**

## Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **21.4 liter(s)**

## Steps

- Temp **52 C**, Time **15 min**
- Temp **63 C**, Time **45 min**
- Temp **72 C**, Time **45 min**

## Mash step by step

- Heat up **15.3 liter(s)** of strike water to **58.4C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **45 min** at **63C**
- Keep mash **45 min** at **72C**
- Sparge using **19.4 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount        | Yield  | EBC |
|-------|----------------------------|---------------|--------|-----|
| Grain | Viking Pilsner malt        | 5 kg (82%)    | 82 %   | 4   |
| Grain | Strzegom Monachijski typ I | 1 kg (16.4%)  | 79 %   | 16  |
| Grain | Acid Malt                  | 0.1 kg (1.6%) | 58.7 % | 6   |

## Hops

| Use for             | Name        | Amount | Time   | Alpha acid |
|---------------------|-------------|--------|--------|------------|
| Boil                | Magnum      | 30 g   | 60 min | 11.5 %     |
| Aroma (end of boil) | Hersbrucker | 40 g   | 10 min | 4 %        |

## Yeasts

| Name                        | Type  | Form  | Amount | Laboratory |
|-----------------------------|-------|-------|--------|------------|
| Lalbrew Diamond Lager Yeast | Lager | Slant | 500 ml | #89        |