

# Jasne że Pełne 20l.

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **21**
- SRM **3.6**
- Style **Bohemian Pilsener**

## 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 **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

## Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **15.9 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Słód pilzneński            | 3.8 kg (71.7%) | --- % | 4   |
| Grain | Carahell                   | 0.2 kg (3.8%)  | 77 %  | 26  |
| Grain | Płatki ryżowe błyskawiczne | 1.2 kg (22.6%) | --- % | --- |
| Grain | zakwaszający               | 0.1 kg (1.9%)  | --- % | --- |

## Hops

| Use for | Name                         | Amount | Time   | Alpha acid |
|---------|------------------------------|--------|--------|------------|
| Boil    | lunga PL 2018                | 15 g   | 60 min | 11 %       |
| Boil    | Lubelski PL 2018 Polish Hops | 30 g   | 10 min | 2.4 %      |
| Boil    | Lubelski PL 2018 Polish Hops | 30 g   | 1 min  | 2.4 %      |

## Yeasts

| Name                               | Type  | Form | Amount | Laboratory      |
|------------------------------------|-------|------|--------|-----------------|
| Mangrove Jack's M84 Bohemian Lager | Lager | Dry  | 10 g   | Mangrove Jack's |

## Extras

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

| Type   | Name        | Amount | Use for | Time  |
|--------|-------------|--------|---------|-------|
| Fining | whirlfloe T | 1.25 g | Boil    | 5 min |