

## #11 POLSKIE JASNE (PILS)

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- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **29**
- SRM **4**
- Style **German Pilsner (Pils)**

### 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 **3.3 liter(s) / kg**
- Mash size **14.8 liter(s)**
- Total mash volume **19.4 liter(s)**

### Steps

- Temp **68 C**, Time **70 min**
- Temp **77 C**, Time **10 min**

### Mash step by step

- Heat up **14.8 liter(s)** of strike water to **75.3C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **10 min** at **77C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński        | 4 kg (88.9%)   | 80 %  | 4   |
| Grain | Strzegom Monachijski typ I | 0.5 kg (11.1%) | 79 %  | 16  |

### Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Marynka           | 20 g   | 50 min | 10 %       |
| Boil                | Lublin (Lubelski) | 20 g   | 20 min | 4 %        |
| Aroma (end of boil) | Lublin (Lubelski) | 20 g   | 5 min  | 4 %        |

### Yeasts

| Name        | Type  | Form | Amount | Laboratory |
|-------------|-------|------|--------|------------|
| Safale S-23 | Lager | Dry  | 11.5 g | ---        |