

## 13# Polskie Jasne Pełne Ale

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **43**
- SRM **5.4**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **20 min**
- Evaporation rate **10 %/h**
- Boil size **24.8 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.57 liter(s) / kg**
- Mash size **25 liter(s)**
- Total mash volume **32 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **25 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **1 min** at **78C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **24.8 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount       | Yield | EBC |
|-------|----------------------------|--------------|-------|-----|
| Grain | Pilzneński                 | 6 kg (85.7%) | 81 %  | 4   |
| Grain | Strzegom Monachijski typ I | 1 kg (14.3%) | 79 %  | 16  |

### Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Marynka           | 50 g   | 30 min | 10 %       |
| Aroma (end of boil) | Lublin (Lubelski) | 100 g  | 5 min  | 4 %        |

Na flame out i chłodzenie, może hopstand z 10min na 80\*.

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 22 g   | Fermentis  |

### Notes

- 25l wody do zacierania  
Obj zacieru 32l  
25-7=18l  
24-18=6l do wysładzania  
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