

# Jasne Pełne

- Gravity **15.7 BLG**
- ABV ---
- IBU **42**
- SRM **6.4**
- Style **English IPA**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **95 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

## Steps

- Temp **70 C**, Time **30 min**
- Temp **65 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **15.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **70C**
- Keep mash **5 min** at **78C**
- Sparge using **18.6 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Pale Ale Malt Europe | 4 kg (76.9%)  | 80 %  | 7   |
| Grain | Pszeniczny           | 0.5 kg (9.6%) | 85 %  | 4   |
| Grain | Płatki jęczmienne    | 0.4 kg (7.7%) | 85 %  | 3   |
| Grain | Strzegom Karmel 30   | 0.3 kg (5.8%) | 75 %  | 30  |

## Hops

| Use for             | Name       | Amount | Time     | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil                | Magnum     | 40 g   | 60 min   | 8.6 %      |
| Aroma (end of boil) | Willamette | 30 g   | 30 min   | 4.7 %      |
| Whirlpool           | Willamette | 30 g   | 30 min   | 4.7 %      |
| Dry Hop             | Willamette | 40 g   | 3 day(s) | 4.7 %      |

## Yeasts

| Name                  | Type | Form  | Amount | Laboratory       |
|-----------------------|------|-------|--------|------------------|
| FM11 Wichrowe Wzgórza | Ale  | Slant | 150 ml | Fermentum Mobile |

## Extras

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 5 g    | Boil    | 10 min |

### Notes

- Whirlpool 70 C 30min  
*Sep 26, 2016, 9:25 PM*