

# jasne trzasnę

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **35**
- SRM **6.6**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.9 liter(s)**
- Total mash volume **17.2 liter(s)**

## Steps

- Temp **51 C**, Time **10 min**
- Temp **68 C**, Time **80 min**
- Temp **75.6 C**, Time **5 min**

## Mash step by step

- Heat up **12.9 liter(s)** of strike water to **56.2C**
- Add grains
- Keep mash **10 min** at **51C**
- Keep mash **80 min** at **68C**
- Keep mash **5 min** at **75.6C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount          | Yield | EBC |
|-------|----------------------------|-----------------|-------|-----|
| Grain | Pilzneński                 | 2.55 kg (59.3%) | 81 %  | 4   |
| Grain | Strzegom Monachijski typ I | 1.4 kg (32.6%)  | 79 %  | 22  |
| Grain | Karmelowy Jasny 30EBC      | 0.35 kg (8.1%)  | 75 %  | 30  |

## Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Marynka           | 25 g   | 60 min | 10 %       |
| Boil    | Lublin (Lubelski) | 40 g   | 5 min  | 4 %        |

## Yeasts

| Name                                  | Type | Form   | Amount | Laboratory |
|---------------------------------------|------|--------|--------|------------|
| WLP099 - Super High Gravity Ale Yeast | Ale  | Liquid | 35 ml  | White Labs |