

# Jankes duży

- Gravity **13.5 BLG**
- ABV ---
- IBU **40**
- SRM **9.7**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **10 %**
- Size with trub loss **33 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **38 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25 liter(s)**
- Total mash volume **33.4 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**

## Mash step by step

- Heat up **25 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **21.4 liter(s)** of **76C** water or to achieve **38 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount          | Yield | EBC |
|-------|---------------------|-----------------|-------|-----|
| Grain | Strzegom Pale Ale   | 7.25 kg (86.8%) | 79 %  | 6   |
| Grain | Strzegom Karmel 150 | 0.35 kg (4.2%)  | 75 %  | 150 |
| Grain | Pszeniczny          | 0.75 kg (9%)    | 85 %  | 4   |

## Hops

| Use for             | Name                   | Amount | Time     | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil                | Columbus/Tomahawk/Zeus | 25 g   | 30 min   | 15.5 %     |
| Boil                | Columbus/Tomahawk/Zeus | 15 g   | 20 min   | 15.5 %     |
| Boil                | Chinook                | 15 g   | 15 min   | 13 %       |
| Aroma (end of boil) | Citra                  | 15 g   | 0 min    | 12 %       |
| Aroma (end of boil) | Cascade                | 15 g   | 0 min    | 6 %        |
| Dry Hop             | Cascade                | 30 g   | 4 day(s) | 6 %        |
| Dry Hop             | Citra                  | 30 g   | 4 day(s) | 12 %       |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11 g   | Fermentis  |