

# Probusowe

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- Gravity **10.1 BLG**
- ABV ---
- IBU **10**
- SRM **20.8**
- Style **Rye IPA**

## Batch size

- Expected quantity of finished beer **14.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.2 liter(s)**
- Boil time **45 min**
- Evaporation rate **10 %/h**
- Boil size **16.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **7.7 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **21.4 liter(s)**

## Steps

- Temp **45 C**, Time **20 min**
- Temp **50 C**, Time **30 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **50 min**

## Mash step by step

- Heat up **18.9 liter(s)** of strike water to **46.6C**
- Add grains
- Keep mash **20 min** at **45C**
- Keep mash **30 min** at **50C**
- Keep mash **40 min** at **62C**
- Keep mash **50 min** at **72C**
- Sparge using **-0.1 liter(s)** of **76C** water or to achieve **16.3 liter(s)** of wort

## Fermentables

| Type  | Name                           | Amount         | Yield | EBC  |
|-------|--------------------------------|----------------|-------|------|
| Grain | Strzegom Pale Ale              | 1 kg (40.7%)   | 79 %  | 6    |
| Grain | Pilzneński                     | 1 kg (40.7%)   | 81 %  | 4    |
| Grain | Pszeniczny                     | 0.1 kg (4.1%)  | 80 %  | 4    |
| Grain | Żytni                          | 0.3 kg (12.2%) | 85 %  | 190  |
| Grain | Strzegom<br>Czekoladowy ciemny | 0.06 kg (2.4%) | 68 %  | 1200 |

## Hops

| Use for | Name       | Amount | Time     | Alpha acid |
|---------|------------|--------|----------|------------|
| Boil    | Challenger | 6 g    | 0 min    | 8.3 %      |
| Boil    | Challenger | 6 g    | 30 min   | 8.3 %      |
| Boil    | Fuggles    | 5 g    | 30 min   | 4.9 %      |
| Dry Hop | Fuggles    | 4 g    | 5 day(s) | 4.9 %      |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                      |     |     |      |         |
|----------------------|-----|-----|------|---------|
| Danstar - Nottingham | Ale | Dry | 11 g | Danstar |
|----------------------|-----|-----|------|---------|