

# Speeder

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **4**
- SRM **3.6**
- Style **Specialty Beer**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **3 %**
- Size with trub loss **23.8 liter(s)**
- Boil time **70 min**
- Evaporation rate **12 %/h**
- Boil size **29.1 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.2 liter(s)**
- Total mash volume **22.1 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **40 min**

## Mash step by step

- Heat up **17.2 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **40 min** at **72C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **29.1 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount          | Yield  | EBC |
|-------|----------------------|-----------------|--------|-----|
| Grain | Viking Pale Ale malt | 2.5 kg (44.2%)  | 80 %   | 5   |
| Grain | Płatki owsiane       | 1.4 kg (24.8%)  | 85 %   | 3   |
| Grain | Pszeniczny           | 0.5 kg (8.8%)   | 85 %   | 4   |
| Grain | Żytni                | 0.5 kg (8.8%)   | 85 %   | 8   |
| Sugar | Milk Sugar (Lactose) | 0.75 kg (13.3%) | 76.1 % | 0   |

## Hops

| Use for   | Name  | Amount | Time   | Alpha acid |
|-----------|-------|--------|--------|------------|
| Whirlpool | lunga | 15 g   | 15 min | 11 %       |

## Yeasts

| Name                       | Type | Form  | Amount | Laboratory |
|----------------------------|------|-------|--------|------------|
| WLP002 - English Ale Yeast | Ale  | Slant | 100 ml | White Labs |
| Bakterie L.Plantarum       | Ale  | Dry   | 5 g    | Serowar.pl |

## Extras

| Type   | Name            | Amount | Use for | Time  |
|--------|-----------------|--------|---------|-------|
| Flavor | Sok z 10 cytryn | 550 g  | Boil    | 1 min |

|        |                  |       |      |       |
|--------|------------------|-------|------|-------|
| Flavor | Zest z 10 cytryn | 130 g | Boil | 1 min |
|--------|------------------|-------|------|-------|