

grand kwas

- Gravity **20 BLG**
- ABV ---
- IBU **14**
- SRM **13.3**
- Style **Flanders Red Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **75 min**
- Evaporation rate **4 %/h**
- Boil size **23.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **25.9 liter(s)**

Steps

- Temp **64 C**, Time **1 min**
- Temp **62 C**, Time **30 min**
- Temp **73 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18.9 liter(s)** of strike water to **69.8C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **1 min** at **64C**
- Keep mash **40 min** at **73C**
- Keep mash **10 min** at **78C**
- Sparge using **11.2 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|--------|-----|
| Grain | Pilzneński | 5 kg (71.4%) | 81 % | 4 |
| Grain | Strzegom Monachijski typ II | 1 kg (14.3%) | 79 % | 22 |
| Grain | Płatki pszeniczne | 0.5 kg (7.1%) | 85 % | 3 |
| Grain | Special B Malt | 0.25 kg (3.6%) | 65.2 % | 315 |
| Grain | caramunich | 0.25 kg (3.6%) | 70 % | 120 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil | Saaz (Czech Republic) | 30 g | 65 min | 3.5 % |
| Boil | Saaz (Czech Republic) | 20 g | 25 min | 3.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|-------|--------|------------|
| s-33 | Ale | Slant | 100 ml | fermentis |

| | | | | |
|---------------------------------------|-----|--------|-------|------------|
| WLP653 - Brettanomyces lambicus | Ale | Liquid | 30 ml | White Labs |
|---------------------------------------|-----|--------|-------|------------|