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

| Туре | Name | Amount | Yield | EBC |
|-------|--------------------------------|-----------------------|--------|-----|
| Grain | Pilzneński | 5 kg (71.4%) | 81 % | 4 |
| Grain | Strzegom Monachijski typ II | 1 kg <i>(14.3%)</i> | 79 % | 22 |
| Grain | Płatki pszeniczne | 0.5 kg <i>(7.1%)</i> | 85 % | 3 |
| Grain | Special B Malt | 0.25 kg <i>(3.6%)</i> | 65.2 % | 315 |
| Grain | caramunich | 0.25 kg <i>(3.6%)</i> | 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 | Туре | Form | Amount | Laboratory |
|------|------|-------|--------|------------|
| s-33 | Ale | Slant | 100 ml | fermentis |

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