

TEST wydajności zacierania i strat

- Gravity **14.5 BLG**
- ABV ---
- IBU **26**
- SRM **4.4**
- Style **Witbier**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **18 %/h**
- Boil size **30.7 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **28.4 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **21.3 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **66C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **30.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------|----------------|-------|-----|
| Grain | Pszenica niesłodowana | 1 kg (14.1%) | 75 % | 3 |
| Grain | Strzegom Pilzneński | 4.7 kg (66.2%) | 80 % | 4 |
| Grain | Strzegom Pszeniczny | 1 kg (14.1%) | 81 % | 6 |
| Grain | Płatki owsiane | 0.4 kg (5.6%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|----------|------------|
| Boil | Cascade | 30 g | 50 min | 6 % |
| Aroma (end of boil) | Lublin (Lubelski) | 30 g | 10 min | 4 % |
| Aroma (end of boil) | Citra | 30 g | 5 min | 12 % |
| Dry Hop | Citra | 20 g | 4 day(s) | 12 % |
| Dry Hop | Lublin (Lubelski) | 20 g | 4 day(s) | 4 % |

Yeasts

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

| | | | | |
|--------------|-----|-----|--------|-----|
| Safeale K-97 | Ale | Dry | 11.5 g | --- |
|--------------|-----|-----|--------|-----|

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------------------|--------|---------|--------|
| Flavor | Curacao | 20 g | Boil | 10 min |
| Flavor | Skórka słodkiej pomarańczy | 20 g | Boil | 10 min |
| Flavor | Kolendra | 25 g | Boil | 10 min |
| Flavor | Trawa cytrynowa | 15 g | Boil | 5 min |