

Z wora

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **37**
- SRM **5.2**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- 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 **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **17.2 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale | 4 kg (81.6%) | 79 % | 7 |
| Grain | Viking Wheat Malt | 0.25 kg (5.1%) | 83 % | 5 |
| Grain | Strzegom Karmel 30 | 0.25 kg (5.1%) | 75 % | 35 |
| Grain | płatki jęczmienne | 0.4 kg (8.2%) | 65 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|----------|------------|
| Boil | Magnum | 15 g | 60 min | 13.5 % |
| Boil | Lublin (Lubelski) | 30 g | 25 min | 5 % |
| Boil | Lublin (Lubelski) | 20 g | 10 min | 5 % |
| Dry Hop | Lublin (Lubelski) | 20 g | 5 day(s) | 5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|--------|----------------|-----|------|--------|
| Fining | mech irlandzki | 5 g | Boil | 15 min |
|--------|----------------|-----|------|--------|