

CzIP

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **45**
- SRM **8.9**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (83.3%) | 80 % | 5 |
| Grain | Pszeniczny | 0.5 kg (8.3%) | 85 % | 4 |
| Grain | Strzegom Karmel 30 | 0.3 kg (5%) | 75 % | 30 |
| Grain | Strzegom Czekoladowy jasny | 0.2 kg (3.3%) | 68 % | 400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------------|--------|----------|------------|
| Boil | Premiant | 25 g | 60 min | 14 % |
| Boil | Saaz (Czech Republic) | 20 g | 30 min | 4.3 % |
| Boil | Saaz (Czech Republic) | 15 g | 15 min | 4.3 % |
| Boil | Sladek | 10 g | 15 min | 5.5 % |
| Boil | Saaz (Czech Republic) | 15 g | 5 min | 4.3 % |
| Boil | Sladek | 10 g | 5 min | 5.5 % |
| Dry Hop | Saaz (Czech Republic) | 5 g | 8 day(s) | 4.3 % |

| | | | | |
|---------|--------|------|----------|-------|
| Dry Hop | Sladek | 10 g | 8 day(s) | 5.5 % |
|---------|--------|------|----------|-------|

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 150 ml | Fermentis |