

Polskie Stratosferyczne

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **24**
- SRM **6.4**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **35.3 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 **44 C**, Time **30 min**
- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **30 min** at **44C**
- Keep mash **45 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **23.3 liter(s)** of **76C** water or to achieve **35.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 2.8 kg (46.7%) | 80 % | 5 |
| Grain | Pszeniczny | 1.2 kg (20%) | 85 % | 4 |
| Grain | Abbey Malt Weyermann | 1 kg (16.7%) | 75 % | 45 |
| Grain | Strzegom Pilzneński | 1 kg (16.7%) | 80 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Marynka | 20 g | 60 min | 10 % |
| Boil | Citra | 10 g | 20 min | 12 % |
| Aroma (end of boil) | Simcoe | 30 g | 0 min | 13.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
| S-05 | Ale | Dry | 20 g | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|--------|------------|--------|---------|--------|
| Fining | whirlflock | 0.5 g | Boil | 10 min |