

Caskaderowy czad

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **29**
- SRM **4.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **26.2 liter(s)**

Steps

- Temp **67 C**, Time **85 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **20.1 liter(s)** of strike water to **74.1C**
- Add grains
- Keep mash **85 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (82%) | 80 % | 5 |
| Grain | Pszeniczny | 1 kg (16.4%) | 85 % | 4 |
| Grain | Strzegom Zakwaszający | 0.1 kg (1.6%) | --- % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Magnat | 20 g | 60 min | 12.5 % |
| Boil | Cascade PL | 20 g | 20 min | 5.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|------------------|--------|---------|--------|
| Water Agent | Kwasek cytrynowy | 0.75 g | Boil | 60 min |