

Warka strong

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **31**
- SRM **13**
- Style **Strong Scotch Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **2 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.9 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.7 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **15 min**

Mash step by step

- Heat up **18.7 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **15 min** at **76C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **25.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------|-----------------|-------|-----|
| Grain | Strzegom Pale Ale | 3.23 kg (60.6%) | 79 % | 6 |
| Grain | Jęczmień niesłodowany | 0.81 kg (15.2%) | 75 % | 2 |
| Grain | Strzegom Karmel 300 | 0.48 kg (9.1%) | 70 % | 299 |
| Grain | Pszeniczny | 0.81 kg (15.2%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|---------|--------|------------|
| Boil | Progress | 24.23 g | 60 min | 6.9 % |
| Boil | Progress | 24.23 g | 30 min | 6.9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|---------|------------|
| Bayanus 995 | Wine | Dry | 17.77 g | --- |

Extras

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

| | | | | |
|--------|----------------|--------|------|--------|
| Fining | Mech Irlandzki | 8.07 g | Boil | 15 min |
|--------|----------------|--------|------|--------|