

# Warka strong

- Gravity **14.7 BLG**
- ABV ---
- IBU **31**
- SRM **13.7**
- Style **Strong Scotch Ale**

## Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **2 %**
- Size with trub loss **13.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.5 liter(s)**
- Total mash volume **14.8 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 **11.5 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **15 min** at **76C**
- Sparge using **6.6 liter(s)** of **76C** water or to achieve **14.8 liter(s)** of wort

## Fermentables

| Type  | Name                  | Amount         | Yield | EBC |
|-------|-----------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale     | 2 kg (60.6%)   | 79 %  | 6   |
| Grain | Jęczmień niesłodowany | 0.5 kg (15.2%) | 75 %  | 2   |
| Grain | Strzegom Karmel 300   | 0.3 kg (9.1%)  | 70 %  | 299 |
| Grain | Pszeniczny            | 0.5 kg (15.2%) | 85 %  | 4   |

## Hops

| Use for | Name     | Amount | Time   | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil    | Progress | 15 g   | 60 min | 6.9 %      |
| Boil    | Progress | 15 g   | 30 min | 6.9 %      |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Bayanus 995 | Wine | Dry  | 11 g   | ---        |

## Extras

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

|        |                |     |      |        |
|--------|----------------|-----|------|--------|
| Fining | Mech Irlandzki | 5 g | Boil | 15 min |
|--------|----------------|-----|------|--------|