

#

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **33**
- SRM **4.5**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **15.8 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **12.3 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **7 liter(s)** of **76C** water or to achieve **15.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------|----------------|-------|-----|
| Grain | słód pilzneński | 2.5 kg (71.4%) | 80 % | 4 |
| Grain | Strzegom Wiedeński | 1 kg (28.6%) | 80 % | 8 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|----------|------------|
| Boil | Magnum | 10 g | 50 min | 12.9 % |
| Boil | Magnum | 10 g | 20 min | 12.9 % |
| Dry Hop | Magnum | 10 g | 4 day(s) | 12.9 % |
| Dry Hop | Cascade | 15 g | 2 day(s) | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|-------|--------|------------|
| us 05 | Ale | Slant | 100 ml | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-------------------|--------|---------|--------|
| Other | płatki jęczmienne | 100 g | Mash | 60 min |
| Flavor | dzika róża | 60 g | Boil | 60 min |

| | | | | |
|--------|----------------|------|-----------|-----------|
| Fining | mech irlandzki | 5 g | Boil | 15 min |
| Flavor | dzika róža | 50 g | Secondary | 14 day(s) |