

Warka Strong - ver. 3

- Gravity **15.4 BLG**
- ABV ---
- IBU **34**
- SRM **10.7**
- Style **Specialty Beer**

Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **10 %**
- Size with trub loss **17.6 liter(s)**
- Boil time **100 min**
- Evaporation rate **15 %/h**
- Boil size **24 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.7 liter(s)**
- Total mash volume **13.7 liter(s)**

Steps

- Temp **52 C**, Time **15 min**
- Temp **68 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **10.7 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **45 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **24 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|--------|-----|
| Grain | Strzegom Wiedeński | 1 kg (25.3%) | 81 % | 4 |
| Grain | Strzegom Karmel 150 | 0.2 kg (5.1%) | 75 % | 150 |
| Sugar | Cane (Beet) Sugar | 0.9 kg (22.8%) | 100 % | 0 |
| Grain | Barley, Flaked | 0.2 kg (5.1%) | 70 % | 4 |
| Grain | Strzegom Monachijski typ I | 0.5 kg (12.7%) | 79 % | 16 |
| Grain | Strzegom Monachijski typ II | 1 kg (25.3%) | 79 % | 22 |
| Grain | Acid Malt | 0.1 kg (2.5%) | 58.7 % | 6 |
| Grain | Strzegom Karmel 600 | 0.05 kg (1.3%) | 68 % | 601 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|---------|------------|
| Boil | Magnum | 10 g | 100 min | 13.5 % |
| Aroma (end of boil) | Lublin (Lubelski) | 10 g | 35 min | 4 % |
| Boil | Challenger | 10 g | 70 min | 7 % |

| | | | | |
|------|-----------------------|-----|--------|-------|
| Boil | Saaz (Czech Republic) | 3 g | 70 min | 4.5 % |
|------|-----------------------|-----|--------|-------|

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|---------|
| Fining | mech irlandzki | 3 g | Boil | 100 min |