

Wedding Planner

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **27**
- SRM **29.7**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **10 %**
- Size with trub loss **18.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **23.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **17 liter(s)**

Steps

- Temp **52 C**, Time **20 min**
- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **12.8 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **40 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **23.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|--------------------------------|----------------|-------|-----|
| Grain | Weyermann - Monachijski II | 2 kg (41.2%) | 78 % | 22 |
| Grain | Weyermann - Pilzeński | 1 kg (20.6%) | 78 % | 4 |
| Grain | Weyermann - Diastatyczny | 0.25 kg (5.2%) | 78 % | 3 |
| Grain | Strzegom - Wędzony Czereśnia | 0.5 kg (10.3%) | 70 % | 9 |
| Grain | Weyermann - Carafa I Special | 0.5 kg (10.3%) | 70 % | 900 |
| Adjunct | Płatki Jęczmienne Błyskawiczne | 0.6 kg (12.4%) | 70 % | 1 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil | english golding | 40 g | 20 min | 4.8 % |
| Boil | Chinook | 20 g | 15 min | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------------------|-------------|-------------|---------------|-------------------|
| Mangrove Jack's - Empire Ale M15 | Ale | Dry | 10 g | Mangrove Jack's |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------------|---------------|----------------|-------------|
| Flavor | Ziarna Kakaowca | 200 g | Secondary | 5 day(s) |
| Flavor | Śliwka suszona | 100 g | Secondary | 5 day(s) |
| Fining | Mech irlandzki | 20 g | Boil | 15 min |