

Bitter Styrian

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **31**
- SRM **9.2**
- Style **Standard/Ordinary Bitter**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

Steps

- Temp **68 C**, Time **70 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **17.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------|---------------|-------|-----|
| Grain | Pilzneński | 5 kg (87.7%) | 81 % | 4 |
| Grain | Cara Crystal | 0.5 kg (8.8%) | 79 % | 150 |
| Grain | Caramunich® typ I | 0.2 kg (3.5%) | 73 % | 80 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------------|--------|--------|------------|
| Boil | Styrian Golding | 30 g | 60 min | 3.6 % |
| Boil | Amarillo | 20 g | 15 min | 9.5 % |
| Boil | Citra | 20 g | 15 min | 12 % |
| Aroma (end of boil) | Styrian Golding | 30 g | 0 min | 3.6 % |
| Aroma (end of boil) | Citra | 30 g | 0 min | 12 % |
| Aroma (end of boil) | Amarillo | 20 g | 0 min | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------------|------|--------|---------|------------|
| FM10 O czym szumią wierzby | Ale | Liquid | 1000 ml | --- |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------|--------|---------|--------|
| Fining | Whirflock | 7 g | Boil | 70 min |
| Water Agent | Sól | 7 g | Boil | 70 min |