

Hamerica

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **25**
- SRM **3.1**
- Style **Witbier**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **15.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **8.8 liter(s)**
- Total mash volume **11.3 liter(s)**

Steps

- Temp **66 C**, Time **90 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **8.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **90 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **9.6 liter(s)** of **76C** water or to achieve **15.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------|---------------|-------|-----|
| Grain | Pilzneński | 1.25 kg (50%) | 81 % | 4 |
| Grain | Płatki pszeniczne | 0.75 kg (30%) | 85 % | 3 |
| Grain | Pszeniczny | 0.25 kg (10%) | 85 % | 4 |
| Grain | Płatki owsiane | 0.25 kg (10%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | Magnat | 6.5 g | 60 min | 7.8 % |
| Boil | Citra | 18 g | 5 min | 12 % |
| Boil | Amarillo | 18 g | 5 min | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------|-------|--------|--------|------------------|
| FM20 Białe Walonki | Wheat | Liquid | 1 ml | Fermentum Mobile |

Extras

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

| | | | | |
|-------|----------------------------|------|------|-------|
| Spice | Kolendra | 10 g | Boil | 7 min |
| Spice | Curacao | 10 g | Boil | 7 min |
| Spice | Skórka słodkiej pomarańczy | 10 g | Boil | 7 min |