

Smoke Apple

- Gravity **7.3 BLG**
- ABV **2.8 %**
- IBU **21**
- SRM **3.2**
- Style **Grodziskie/Graetzer**

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 **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **4.9 liter(s)**
- Total mash volume **6.6 liter(s)**

Steps

- Temp **38 C**, Time **45 min**
- Temp **63 C**, Time **21 min**
- Temp **72 C**, Time **22 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **4.9 liter(s)** of strike water to **41C**
- Add grains
- Keep mash **45 min** at **38C**
- Keep mash **21 min** at **63C**
- Keep mash **22 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **12 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------|-----------------|-------|-----|
| Grain | Viking Malt Wędzony jabłoń | 0.7 kg (42.4%) | 82 % | 10 |
| Grain | Strzegom Pilzneński | 0.45 kg (27.3%) | 80 % | 4 |
| Grain | Pszeniczny | 0.5 kg (30.3%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | Lomik | 15 g | 50 min | 4 % |
| Boil | lomik | 10 g | 20 min | 4 % |
| Boil | Lomik | 10 g | 10 min | 3.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safbrew S-33 | Ale | Dry | 13 g | Safbrew |

Extras

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

| | | | | |
|--------|--------------|-------|------|--------|
| Fining | Whirlflock T | 1.2 g | Boil | 15 min |
|--------|--------------|-------|------|--------|