

IP N 07/23/XI

- Gravity **20.2 BLG**
- ABV **8.9 %**
- IBU **37**
- SRM **12.6**
- Style **Old Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.6 liter(s)**
- Total mash volume **32.8 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **69 C**, Time **30 min**
- Temp **75 C**, Time **15 min**

Mash step by step

- Heat up **24.6 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **69C**
- Keep mash **15 min** at **75C**
- Sparge using **8.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------|----------------|-------|-----|
| Grain | Strzegom Karmel 150 | 0.5 kg (6.1%) | 75 % | 150 |
| Grain | Viking Malt Smoked Peat | 7.7 kg (93.9%) | 81 % | 10 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil | Bravo | 10 g | 15 min | 15.5 % |
| Boil | Columbus/Tomahawk/Zeus | 20 g | 15 min | 15.5 % |
| 11+9[g] | | | | |
| Aroma (end of boil) | Mosaic | 26 g | 5 min | 10 % |
| Aroma (end of boil) | Strata | 10 g | 5 min | 13.6 % |
| Boil | Lublin (Lubelski) | 50 g | 15 min | 4 % |
| Aroma (end of boil) | Centennial | 20 g | 5 min | 10.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|----------------|-----|-----|--------|-----------|
| Safbrew BE-256 | Ale | Dry | 11.5 g | Fermentis |
| Safale K-97 | Ale | Dry | 11.5 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|----------------|--------|---------|--------|
| Water Agent | Burak czerwony | 100 g | Mash | 30 min |
| Herb | Hibiskus | 1 g | Boil | 10 min |