

## 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<br>150     | 0.5 kg (6.1%)  | 75 %  | 150 |
| Grain | Viking Malt Smoked<br>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 |