

## Sztorm w porcie

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- Gravity **12.9 BLG**
- ABV ---
- IBU **19**
- SRM **28.1**
- Style **Brown Porter**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss --- %
- Size with trub loss --- **liter(s)**
- Boil time **70 min**
- Evaporation rate --- %/h
- Boil size --- **liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio --- **liter(s) / kg**
- Mash size **13 liter(s)**
- Total mash volume **17 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **13 liter(s)** of strike water to **74.2C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **78C**
- Sparge using **-9 liter(s)** of **76C** water

### Fermentables

| Type  | Name                      | Amount | Yield | EBC |
|-------|---------------------------|--------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 3.6 kg | 85 %  | 8   |
| Grain | Caraaroma                 | 0.3 kg | 78 %  | 540 |
| Grain | Carafa                    | 0.1 kg | 70 %  | 932 |

### Hops

| Use for | Name       | Amount | Time   | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil    | Challenger | 30 g   | 5 min  | 7 %        |
| Boil    | Fuggles    | 30 g   | 50 min | 4.5 %      |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11.5 g | Safale     |