

Mała Czarna

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **25**
- SRM **38.1**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **2 %**
- Size with trub loss **26 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **31.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.9 liter(s)**
- Total mash volume **28.1 liter(s)**

Steps

- Temp **67 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **21.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **16.2 liter(s)** of **76C** water or to achieve **31.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 4 kg (64%) | 80 % | 5 |
| Grain | Viking Malt - Pszeniczny | 0.5 kg (8%) | 83 % | 5 |
| Grain | Płatki owsiane | 0.4 kg (6.4%) | 85 % | 3 |
| Grain | Strzegom Czekoladowy ciemny | 0.4 kg (6.4%) | 68 % | 1200 |
| Grain | Viking Malt - Dark Chocolate Malt | 0.35 kg (5.6%) | 60 % | 827 |
| Grain | Viking Malt - Żytni | 0.2 kg (3.2%) | 85 % | 7 |
| Grain | Jęczmień palony | 0.2 kg (3.2%) | 55 % | 985 |
| Grain | Słód Caramunich Typ II Weyermann | 0.2 kg (3.2%) | 73 % | 120 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil | Northdown | 25 g | 60 min | 8.2 % |
| Boil | Fuggles | 25 g | 30 min | 4.5 % |

Yeasts

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

| | | | | |
|-----|-----|-----|--------|-----|
| S04 | Ale | Dry | 11.5 g | --- |
|-----|-----|-----|--------|-----|

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------|--------|---------|--------|
| Flavor | Ksylitol | 300 g | Boil | 30 min |
| Flavor | Laktoza | 500 g | Boil | 30 min |