

X-Mass Porter

- Gravity **23.1 BLG**
- ABV **10.5 %**
- IBU **33**
- SRM **28.5**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **33.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **34.9 liter(s)**
- Total mash volume **46.6 liter(s)**

Steps

- Temp **64 C**, Time **25 min**
- Temp **71 C**, Time **50 min**

Mash step by step

- Heat up **34.9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **25 min** at **64C**
- Keep mash **50 min** at **71C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **33.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|-----------------|-------|------|
| Grain | Strzegom Wiedeński | 2.84 kg (24.4%) | 79 % | 10 |
| Grain | Strzegom Monachijski typ II | 2.36 kg (20.3%) | 79 % | 22 |
| Grain | Strzegom Pilzneński | 2.36 kg (20.3%) | 80 % | 4 |
| Grain | Barley, Flaked | 1.35 kg (11.6%) | 70 % | 4 |
| Grain | Caramunich | 0.47 kg (4%) | 73 % | 115 |
| Grain | Carahell | 0.47 kg (4%) | 77 % | 26 |
| Grain | Carafa II | 0.14 kg (1.2%) | 70 % | 812 |
| Grain | Brown Malt (British Chocolate) | 0.68 kg (5.8%) | 70 % | 128 |
| Grain | special X | 0.54 kg (4.6%) | 70 % | 350 |
| Grain | czekoladowy | 0.09 kg (0.8%) | 70 % | 1200 |
| Grain | Wędzony bukiem Viking Malt | 0.34 kg (2.9%) | 82 % | 10 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|---------|--------|------------|
| Boil | Sybilla | 67.57 g | 60 min | 3.5 % |
| Boil | Marynka | 33.78 g | 60 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------------|-------|--------|-----------|------------|
| WLP920 - Old Bavarian Lager Yeast | Lager | Liquid | 135.14 ml | White Labs |