

#61 Milk Stout IV

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **30**
- SRM **28.5**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **9 liter(s)**
- Trub loss **5 %**
- Size with trub loss **9.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **11.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.8 liter(s) / kg**
- Mash size **8.1 liter(s)**
- Total mash volume **10.2 liter(s)**

Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **2 min**

Mash step by step

- Heat up **8.1 liter(s)** of strike water to **74.3C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **2 min** at **77C**
- Sparge using **5.1 liter(s)** of **76C** water or to achieve **11.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------------|-----------------|--------|------|
| Grain | Briess - Pale Ale Malt | 1.5 kg (63.3%) | 80 % | 7 |
| Grain | Grodziski pszeniczny wędzony dębem | 0.17 kg (7.2%) | 80 % | 3 |
| Grain | Płatki owsiane | 0.15 kg (6.3%) | 85 % | 3 |
| Grain | Strzegom Czekoladowy jasny | 0.08 kg (3.4%) | 68 % | 400 |
| Grain | Strzegom Czekoladowy ciemny | 0.06 kg (2.5%) | 68 % | 1200 |
| Grain | Abbey Malt Weyermann | 0.06 kg (2.5%) | 75 % | 45 |
| Grain | Weyermann - Carafa II Special | 0.06 kg (2.5%) | 65 % | 1150 |
| Grain | Strzegom Barwiący | 0.04 kg (1.7%) | 68 % | 1300 |
| Sugar | Milk Sugar (Lactose) | 0.25 kg (10.5%) | 76.1 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | lunga | 8 g | 50 min | 11 % |

| | | | | |
|---------------------|----------|------|-------|-------|
| Aroma (end of boil) | Cashmere | 27 g | 5 min | 6.7 % |
| Aroma (end of boil) | lunga | 4 g | 5 min | 11 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 70 ml | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------|--------|---------|--------|
| Fining | WhirlFloc | 1 g | Boil | 12 min |