

Kvas Zhizha - Summary

Reproducible homemade kvass for people and AI agents

Version 1.1.1.1 · единиц: 4 · Source of truth: [publication/en/summary.md](#)

What this is

Kvas is an open knowledge base for safe and reproducible homemade kvass. **Zhizha** is the project brand and personality. Version 1.1.0 provides the same document structure in five languages, as PDFs and web pages.

3-liter baseline

- water - 3 l;
- fully dry bread crackers - 180-220 g;
- preferably 150 g white + 50-70 g rye or Borodinsky;
- sugar or panela - 100-120 g;
- malt - 20-30 g, or rye flour - 10-20 g;
- fresh yeast - 2-3 g, or dry yeast - 0.5-1 g, for the first batch only.

Do not add new yeast to later batches; use 500 ml old kvass/starter or 3-5 tbsp sediment instead.

Short process

1. Toast bread until dark golden.
2. Pour over boiling water and infuse for 4-8 hours.
3. Strain and keep only the liquid.
4. Add sweetener and cool to 25-35°C.
5. Add starter and ferment for 8-12 hours under cloth or a loose lid.
6. When the smell is normal and bubbles appear, bottle in plastic.
7. Carbonate for 2-6 hours and refrigerate as soon as the bottle becomes firm.
8. Chill for at least 8 hours.

Sugar, panela, maltose, and malt

Bread contains mostly starch, and yeast does not turn it into sugar by itself. A controlled sweetener is therefore needed in the simple recipe. Panela replaces white sugar roughly 1:1 and adds molasses notes. Maltose can ferment but does not replace malt flavor or enzymes. Malt extract is usually better than pure maltose for malt aroma.

Batch state

The AI agent maintains one explicit state: `planning`, `bread_preparation`, `infusion`, `straining`, `cooling`, `inoculation`, `primary_fermentation`, `ready_to_bottle`, `bottling`, `bottle_conditioning`, `chilling`, `ready`, `discard`, or `unknown`. Unknown values remain `null`; stages change only after user confirmation.

Safety

Primary fermentation must not be tightly sealed. After bottle conditioning, refrigerate a plastic bottle as soon as it becomes firm. Discard the batch for mold, fuzzy growth, colored spots, slime, rotten smell, acetone smell, meat-like smell, or sewage smell.

Resources

- AI agent instruction: `agent-instructions/kvas-agent.en.md`
- State model: `agent-instructions/state-model.en.md`
- JSON Schema: `agent-instructions/state.schema.json`
- Full protocol: `recipes/kvas-reproducible.md`
- Batch log: `docs/batch-log-template.md`
- Repository: <https://github.com/bambuchastudent/kvas-ai-agent>