

Carry out dissolved oxygen quality assurance in brewing

Overview

This standard covers the skills and knowledge needed for you to carry out dissolved oxygen quality assurance in brewing.

This standard covers the skills and knowledge needed for monitoring and maintaining the quality of products from a raw material and production perspective, through to the end customer/consumer, within brewing. You need to identify quality problems and take action to resolve these. You will be involved with relevant quality control systems and procedures which are used in your workplace.

This standard is also about understanding the principles of assuring beer dissolved oxygen levels to quality standards in brewing. It covers organisational standards, the role of oxygen in beer spoilage, flavour descriptors for spoilage effects, monitoring and evaluation and good practice in quality assurance.

This standard is for you if you are involved in, and require a broad knowledge and understanding of, assuring beer dissolved oxygen quality in brewing. You may be responsible as a supervisor/team leader in brewing.

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Performance criteria

You must be able to:

1. monitor product quality to organisational requirements
2. identify and report factors which may adversely affect product quality
3. identify and report non-conformances to quality standards to the relevant person
4. take corrective action to reject or isolate products or items which do not conform to specification
5. manage products or items that do not conform through corrective action procedures
6. quarantine products or items that do not conform to prevent accidental use
7. take action to bring product back into quality specification to minimise any loss of product
8. seek advice for quality problems outside your own level of authority or expertise
9. offer support to or seek help for colleagues who encounter quality problems
10. receive and confirm instructions for the resolution of quality problems
11. communicate with others to check that resolutions to quality problems are followed and understood
12. record corrective actions taken to meet required standard
13. carry out quality checks and processes consistently to the required standard
14. carry out quality checks in accordance with the most current and up to date specifications
15. use the correct personal protective equipment
16. complete records in accordance with organisational requirements
17. follow legal and regulatory requirements, hygiene and environmental standards or instructions

Knowledge and understanding

You need to know and understand:

1. the organisational health and safety, hygiene, environmental and quality standards and instructions
2. the personal protective equipment required
3. the work area tools and equipment needed
4. why it is important to check the cleanliness of work area, tools and equipment
5. what the sensitivity of beer is to small amounts of oxygen and what levels cause spoilage
6. what the mechanism is for haze formation
7. what the oxidation reactions are to form flavour compounds
8. what the flavour descriptors are for oxidation effects
9. what the constituency of air is and the proportion of oxygen in it
10. what the typical points of exposure of beer to air are
11. what key control points are and the significance of sampling time
12. what the operating principles of a dissolved oxygen meter are
13. what the significance of dissolved oxygen measurement time is
14. what the typical specified maximum levels of oxygen are
15. what good practices should be employed to avoid oxygen pick-up
16. how to deal with waste materials in accordance with organisational requirements
17. the need for records to be completed within agreed timescales and to an agreed standard
18. what should be communicated, to whom and why it should be done
19. the limits of your authority and the consequences of exceeding them

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