
Overview

This unit is for those who carry out data processing activities after the immediate recording of data at the point of sampling and testing. Data may be recorded by others and brought together in order to validate and assess the outcomes of activities. The person performing this function may not be the one who conducted the sample taking or testing.

The competences described here are evaluative and more analytical although they may use information drawn from simple or complex sampling and testing activities. There will be responsibility for ensuring the validity of the data as opposed to its accurate recording and this may involve reporting to others including colleagues and customers (both internal and external).

This unit deals with the following:

1. Collate and validate data
2. Present results

During this work you must take account of the relevant operational requirements and safe working practices AS THEY APPLY TO YOU.

Previous Version

Adapted from Unit C16 of Polymer Processing and Related Operations NOS – version November 2004. NB This unit is a tailored version of a LATA unit produced by ST & M Council, which was originally designated Unit 3.04.

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Assess data and produce reports

Performance criteria

You must be able to:

- P1 collate and validate data against requirements
- P2 investigate and resolve identified deviations
- P3 apply tolerances to quantitative data
- P4 record, store and retrieve data in accordance with standard operating procedures
- P5 make corrections to data in accordance with standard operating procedures
- P6 work safely at all times, complying with health and safety, environmental and other relevant regulations and guidelines
- P7 process data correctly in order to provide usable information
- P8 ensure that your report draws valid conclusions from the presented data
- P9 identify the characteristics and needs of the target audience
- P10 adopt the most suitable method of presentation
- P11 ensure the presentation of results conforms to relevant procedures
- P12 ensure that the report includes all necessary information and is accurate, clear and concise
- P13 present the report to the relevant people within agreed timescales, using appropriate documentation

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Knowledge and understanding

You need to know and understand:

- K1 your personal responsibilities with regard to health, safety and the environment in your working area
- K2 the approved codes of practice and why it is important to follow them
- K3 the organisation's policy and procedures on safe working practices
- K4 what constitutes complete and valid data
- K5 what methods can be used for validating data
- K6 how identified deviations involving integrity, reliability and the application of relevant statistical techniques can be resolved
- K7 what procedures can be used for correcting data
- K8 what level of accuracy is required
- K9 what units of measurement are required
- K10 what statistical and mathematical techniques can be applied to data
- K11 the procedures for recording, retrieving and correcting data
- K12 the likely or expected outcomes
- K13 how to recognise anomalies in the data against standard operating procedures
- K14 how to interpret data appropriately
- K15 what the appropriate interpretive techniques to be applied to data are
- K16 what methods can be used to process data
- K17 what methods can be used for report writing
- K18 what presentational methods can be used
- K19 how you circulate reports
- K20 the relevant people in the organisation
- K21 what documentation should be used and why it is important to complete it accurately

Additional Information

Glossary

Validation factors

Reliability, accuracy, deviation from expected outcomes, compliance with requirements

Requirements

collating monthly reports on results of precision testing, statistical analysis of sampling results, evaluating data as part of disputes resolution assignment

Standard operating procedures

all relevant organisational requirements, instructions, departmental procedures, codes of practice, organisational regulations, in house procedures, British, European and International standards

Regulations and guidelines

all relevant health, safety and environmental regulations, organisational procedures and guidelines, standard operating procedures, national and organisational standards, site procedures and specific organisational requirements

Process data methods

Conversion to required units, statistical analysis, performing calculations to obtain result

Valid conclusions

Integrity, reliability, acceptability, criteria and range of tolerances, specifications, product use, fitness for purpose, environmental factors

Presentation methods

Written, oral, individual, group

Relevant people

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supervisors, team leaders, managers, heads of departments, health and safety officers

Documentation

All relevant written project reports, data analysis sheets and statistical manipulation of data with supporting commentary

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Suite Polymer Processing and Related Operations

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