

**NPTC LEVEL 2 AWARD IN THE SAFE
USE OF PESTICIDES (QCF)**

**MODULE PA4G
PESTICIDE GRANULE APPLICATOR**

ASSESSMENT SCHEDULE

Module PA 4 PESTICIDE GRANULE APPLICATOR

Mounted or Trailed (excluding pedestrian controlled machines or hand held equipment).

Candidates undertaking assessment will need to complete all assessment activities appropriate to the applicator they use. Assessors will conduct the assessment in the context of the equipment available.

There are a number of methods of calibration candidates may use provided that it produces the correct end result.

NB This assessment is primarily designed to accommodate nematocidal granules, but could be used for other types of granule. It is not designed for slug pellets. The appropriate assessment for slug pellets is PA4S

Objective - Candidates will be able to:-

1. Prepare a pesticide granule applicator for work, calibrate and operate it to ensure correct application rate without risk to themselves, other people and the environment.
2. Use the information detailed on product labels to determine the approved uses for the product and its potential hazards to human safety, non-target areas and the environment in general.
3. Carry out daily and routine maintenance of the applicator.
4. Carry out the correct procedure for clearing personal protective equipment and application equipment which may have been contaminated with pesticide.

There are a number of methods of calibration candidates may use provided that it produces the correct end result.

Qualification and Credit Framework (QCF) – credit value

PA4S has a credit value of 2 credits on the QCF

Safe Practice

Operating the prime mover and/or the equipment in such a way as to put the candidate, Assessor, equipment or the environment at risk will cause the candidate to be declared not yet competent.

All equipment must be of the standard required under current Health & Safety legislation.

Candidates must wear personal protective equipment (PPE) appropriate to the risk whenever carrying out work on the applicator e.g. checking metering devices.

Contaminated PPE should never be taken into tractor cab.

In addition, before entering the cab, any PPE not required by legislation (other than coveralls and wellington boots) should be removed and placed in a suitable tractor locker or enclosed container outside the cab.

Candidates must be especially careful to avoid personal contamination when operating uncabbed or partially cabbed prime movers and be aware of the effect that changing circumstances have on the stability of the equipment.

Pre-requisites

The foundation unit (PA1) is required by candidates before being assessed for this application unit.

Validation of Equipment

Any type of pesticide granule applicator

Operator's instruction book and calibration charts/calculators should be available for use by the candidate throughout the assessment. Any other relevant literature may also be used.

The assessment should be conducted in the context of the work situation.

Candidates who undertake this assessment and are judged 'competent' are reminded of their legal obligation to receive/undertake appropriate additional training in the use of any equipment that differs from that used during the assessment, but which they are nevertheless qualified to use.

Site

Work site with area to allow calibration and an area where field operation can be undertaken.

Suggested facilities and equipment required to run the assessment:

Granule applicator and additional equipment appropriate to the candidate.

First Aid kit which complies with the Health & Safety (First Aid) Regulations 1981

Prime mover matched to granule applicator.

Instruction books for prime mover and granule applicator.

Washing facilities.

Personal Protective Equipment to comply with pesticide label/COSHH risk assessment

Tape measure/Measuring wheel to measure 100m run.

Wind speed gauge.

Suitable tools.

Appropriate containers with pesticide or simulated pesticide granules.

Clean product labels or label duplicates appropriate to the candidate.

Containers for collecting product during calibration.

Accurate scales.

Field markers.

Site for practical work.

Pocket calculator.
Tyre pressure gauge.
Suitable lubricants.
Appropriate site for cleaning applicator.
Appropriate Application Record Sheets.

Assessment Activity	Assessment Criteria
Preparation	
1. Identify applicator controls and components	<ul style="list-style-type: none"> - Metering mechanism - On/off control - All items specific to the applicator
<p>2. Demonstrate knowledge of preparation of prime mover and equipment</p> <p>Demonstrate knowledge of legal requirements and safety regulations</p>	<ul style="list-style-type: none"> - Fit carbon filter - Use in-cab controls - Ensure ventilation system is working correctly - Close all windows - Compatibility of prime mover and applicator - Wheel track width - Front weights - Tyre pressures correct and tyres in good condition - Guards - Be aware of any safety implications imposed by Risk Assessment on the machine and the operation and comply with their requirements - Ensure that all required guards are in place and in good condition - Comply with all relevant <i>road traffic</i> regulations when operating or transporting on the public highway - Comply with the Pesticides Code of Practice
3. Demonstrate knowledge of safe driving	<ul style="list-style-type: none"> - Assess conditions - Desirability of 4-wheel drive - Appropriate speed - Correct gear selected - Applicator correctly attached - Effect of changing load on stability - Use of weights to stabilise the prime mover - Check tyre pressures - Correct turning procedure - Keep centre of gravity as low as possible - Independent brakes coupled together when on a public highway - Travelling at high speed makes vehicle unstable
<p>4. Check applicator for cleanliness and mechanical defects</p> <p>Check security of attachment of application mechanisms.</p> <p>Demonstrate knowledge of lubrication of components.</p>	<ul style="list-style-type: none"> - Hopper, metering and delivery systems checked – free and undamaged - Seized, worn or damaged components - Drive systems - Condition and tension of belts/chains - Method of belt/chain adjustment - Guards serviceable and fitted - Fan blades(if applicable) - Deflector plates - Air supply unimpeded - Boom suspension/break back-devices (if appropriate) - Bolts tight - All linkage secure - Side sway restricted - Identify all lubrication points by using the instruction book - Components that should not be lubricated
5. Read and interpret product label (as supplied or approved by the Assessor)	<ul style="list-style-type: none"> - Field of use - Hazard symbol - PPE requirements - Product being used - Specific product precautions - Appropriate for type of applicator - Dose rate - Maximum number of treatments - Timing - Additional label information - Restrictions on use - Target - Incorporation

Assessment Activity	Assessment Criteria
Site Work	
12. Carry out an environmental risk assessment of the application site	<p>May include:</p> <ul style="list-style-type: none"> - Ground conditions - Water courses - Buffer zones - Drains - Wildlife - Flowering plants - Public access - Sensitive crops - Hedgerows - Housing - Factors particular to the site - Warning signs <ul style="list-style-type: none"> - Check and maintain application rate - Other environmental margins - Warn neighbours - Use an appropriate pesticide - Careful timing of application - Comply with environmental assessment <ul style="list-style-type: none"> - Wind speed gauge at suitable height or visible signs - Wind direction <ul style="list-style-type: none"> - Awareness of likely effects of product on non-target crops, wildlife and the environment - Effect of wind speed and direction - Effect of direction of travel - Need for some products to be soil incorporated with minimal delay - Accuracy of application - Avoid contamination of headlands and hedgerows/waterways
13. Calculate, weigh and add pesticide granules to the hopper.	<ul style="list-style-type: none"> - Ensure approved techniques are followed with due regard to safe practice. - Determine size of area to be treated - Correct application rate - Accurate weighing of pesticide granules
14. Demonstrate knowledge of accurate application procedures on site	<p>Methods of marking may include:</p> <ul style="list-style-type: none"> - Tramlines - Row crops. - Marker poles <ul style="list-style-type: none"> - Field Audit principles <ul style="list-style-type: none"> - Carefully avoid contact with the contaminated area, - Mark the spot at which the hopper emptied, either by a marker in a row or tramline or by any other suitable method. - Continue applying by accurately matching at the appropriate point
15. Apply granules to a given area in a safe and appropriate manner	<ul style="list-style-type: none"> - Avoid operator contact - Operate controls to start and finish applying accurately at beginning and end of each bout - Correct forward speed - Accurate matching of bouts/use of driving aids - Correct height of applicator - Coping with obstacles e.g. electricity poles - All area treated, minimising overlaps or misses. - Awareness of changes in wind speed and direction.

Assessment Activity	Assessment Criteria
Post Operation	
<p>16. Demonstrate knowledge of:</p> <p>a) cleaning and decontamination of the applicator</p> <p>b) the procedure prior to any repair or replacement of parts</p> <p>c) preparation of applicator for storage</p>	<ul style="list-style-type: none"> - Select appropriate site - Follow manufacturer's cleaning procedures - Risk of contamination - Frequency of cleaning - Follow safe procedures - Select an appropriate containment site and possible containers for contaminated material. - Ensure that the applicator is made safe (engine stopped, supports if appropriate). - Ensure that section to be repaired/replaced is safely isolated - Applicator decontaminated - Refer to manufacturer's handbook for guidance - Ensure applicator is clean and decontaminated - Carry out lubrication procedures - Danger of personal contamination - Store under cover and out of direct sunlight - Store in a secure area
<p>17. Complete application record</p>	<ul style="list-style-type: none"> - Records completed - Accurate recording