



## FACT SHEET

# PESTICIDE RESIDUE ANALYSIS

### Summary

This service identifies and quantifies the residual level of lice and fly treatment chemicals in greasy wool, semi-processed wool and wool grease. We can also determine the presence of heavy metals such as Arsenic.

Wool samples are prepared and blended at one of our Raw Wool Laboratories, then sent for chemical analysis at AWTA's Agrifood Technology division in Werribee. Any chemicals present are extracted from the wool using a proprietary process and their concentrations determined using state-of-the-art Gas Chromatography and Liquid Chromatography equipment. Reports are then printed and either posted, faxed or emailed to the requestor. Tests are done in accordance with the International Wool Textile Organisation method DTM59-04.



These services are currently used by Australian Wool Innovation Ltd (AWI) to report national and state based chemical use profiles for the National Wool Residue Survey.

### Service Options:

Various testing and reporting options are available depending on the type of sample, its origin and the chemicals to be analysed.

#### Testing Options:

- **Single Sale Lots**  
From Samples of greasy wool taken as part of AWTA's standard core testing service.
- **Composite (blended) Samples**  
As above, except analysis covers multiple sale lots (up to 10). Samples are retrieved for each of the individual grower lots and blended to form a larger composite sample. Should a reference sample no be longer available, the sale lot must be cored again.
- **EU EcoLabel compliance of Greasy Wool Consignments**  
Consignments can be checked for compliance with the residual chemical concentrations allowed for wool deliveries into the EU. If 10 or more sale lots make up the shipment, then 50gm keeper samples for 10 lots are blended and tested at random. If less than 10 lots make up the delivery, then a 50gm keeper sample for each farm brand is blended and tested.
- **Scoured/Carbonised Wool & Wool Top**  
A 50gm sample from a Scoured/Carbonised Core test is blended and tested. Submitted samples of Wool Top can also be analysed.

#### Additional Testing available:

- **Wool Grease**  
We can analyse Wool Grease to determine levels of chemical residues that may be present. Samples should be forwarded to AWTA in clean, screw top polypropylene jars and clearly labelled with identification. The minimum sample size is 10gms (ideally of blended grease).
- **Arsenic**  
Wool samples can be tested to see if they contain Arsenic residues (sometimes found in old timber sheep dips).
- **Ivermectin and Imidacloprid**  
The residue levels of these additional compounds can be checked for an extra fee.

Tests can be requested:

- **At time of coring - only for single sale lots**  
Mark "Pesticide Test required" on the weight note/floor sheet that is sent with the sale lot Yield and Micron sample. Analysis is then conducted on a 50gm sample as part of the standard service.
- **Post-coring from reference ("keeper") samples - single or composite samples**  
Where the Yield/Micron testing of sale lots has already been completed, analysis can be requested after coring. Simply complete the Pesticide Residue Analysis Request form and submit it to the relevant AWTA Laboratory.
- **On re-cored samples**  
AWTA does not retain reference (keeper) samples indefinitely. If analysis is requested >3 weeks after the Y/M test during the peak of the wool selling season, it is likely that the keeper sample is no longer available so the sale lot will need to be cored again. We will make arrangements for re-coring should it be required.
- **Submitted samples**  
Analysis can be done on any sample of greasy or semi-processed wool. However, if they have not been taken using AWTA registered coring equipment then the testing method may not produce accurate results. Complete the Pesticide Residue Analysis Request form and submit it with the sample via post, courier or delivery to a local AWTA sampling office.
- **International samples**  
Analysis can be conducted on wool samples submitted from outside of Australia provided they comply with quarantine and importation regulations. Please contact us before requesting this service so as to avoid any delays or costly treatments imposed by AQIS that may compromise the identification of compounds in the wool. The limitations of "submitted samples" apply.

Fees:

The respective service fees are published in our [Raw Wool Testing Fees list](#) and updated every July. Some non-standard services are Price on Application (POA).

### Reporting Options:

The test reports display the following information;

- **Concentrations of Chemical Compounds (using method IWTO DTM59-04)**  
The standard test report will show:
  - a) the concentration of individual chemicals
  - b) a summary of the total concentrations of Organophosphates, Organochlorines, Synthetic Pyrethroids, and specific Insect Growth Regulators (Diflubenzuron, Triflumuron & Dicyclanil)
  - c) A statement of compliance against the Eco-Label standards for chemical concentrations of wool exports into the European Union
- **Heavy Metal Screening (optional)**  
Identifies the presence and levels of metals such as Arsenic. For example, this can be used to quantify contamination levels for sheep treated in to old arsenic dips.
- **Wool Grease Residue Analysis (optional)**  
Similar to the standard reporting undertaken for wool samples.

### Availability of Test Results:

Turnaround time is 7 days from the receipt of sample or test request. A printed copy of the test results will be mailed upon completion. Results are also available by fax or email.

#### CONTACT US

For more information on this service contact **AWTA Raw Wool** on:

<b>Melbourne Laboratory:</b>	+61 3 9371 2100	or	<a href="mailto:lab.mel@awta.com.au">lab.mel@awta.com.au</a>
<b>Fremantle Laboratory:</b>	+61 8 9418 5333	or	<a href="mailto:lab.fre@awta.com.au">lab.fre@awta.com.au</a>

## EXAMPLES of REPORTS:

### Greasy Wool Consignment showing EU EcoLabel compliance

A.B.N. 43 006 014 106		REPORT		ORIGINAL	
3-00200622-R3 GREASY WOOL		TEST METHOD IWTO-DTM-59		PAGE 1	
AWTA LTD MELBOURNE 10 BALES		TEST NUMBER		BALES NETT	
REF: AWTA		3-10790033-D8		1 188	
TOTAL BALE WEIGHTS:		AWTA		FLPS	
TEST HOUSE GROSS 1952 KG TARE 20 KG NETT 1929 KG		3-10790034-D9		1 188	
		AWTA		AAAM	
		3-10790035-D0		1 188	
		AWTA		AAAM	
		3-10790036-D1		1 191	
		AWTA		AAAM	
		3-10790037-D2		1 192	
		AWTA		AAA	
		3-10790038-D3		1 193	
		AWTA		AAAXB	
		3-10790039-D4		1 194	
		AWTA		AAFX	
		3-10790040-D5		1 198	
		AWTA		AAALMS	
		3-10790041-D6		1 197	
		AWTA		AAAPCS	
		3-10790042-D7		1 200	
		AWTA		AAFXLMS	
TEST RESULTS:					
1. TOTAL ORGANOPHOSPHATES:		LESS THAN 2 MG/KG			
2. TOTAL SYNTHETIC PYRETHROIDS:		LESS THAN 0.5 MG/KG			
3. TOTAL DIFLUBENZURON & TRIFLUMURON & DICHLANIL		LESS THAN 2 MG/KG			
4. TOTAL ORGANOCHLORINES:		LESS THAN 0.5 MG/KG			
5. EU ECO-LABEL COMPLIANT (2014/35/EC):		YES			
(CYROMAZINE & SPINOSAD ARE EXEMPT)					
ADDITIONAL INFORMATION:					
Analysis values may be slightly higher than the above limits due to the effects of sampling and specimen preparation. The limits of acceptance ensure, with 95% confidence, that wool lots are not unfairly excluded.					
CHARGE: \$ 383.30 GST @ 10 % \$38.33 TOTAL CHARGE: \$ 421.63		CONTINUED ON NEXT PAGE			
089999 977		TESTED AT AGRIFOOD TECHNOLOGY (NATA ACC 2726)			
		SAMPLE SUBMITTED AT MELBOURNE			
		AWTA LTD SERVICE TIME 7 DAYS			
		ISSUED ON 11/12/2012 , PRINTED ON 11/01/2017			
THIS TEST REPORT APPLIES ONLY TO THE SAMPLE TESTED.		For and on behalf of Australian Wool Testing Authority Ltd			
Except where the sample is drawn independently by AWTA Ltd, AWTA Ltd makes no warranty, implied or otherwise, as to the source of the tested sample. The above test results are not certified due to the adoption of modified and/or non-standard procedures designed to provide THE CLIENT WITH GUIDANCE INFORMATION ONLY.		MICHAEL A. JACKSON B.Sc (Hons)		IAN A. ASHMAN B.Sc	
Except where prohibited by law, no responsibility can be accepted by AWTA Ltd for any claim which may arise from any person acting on information contained herein.		MANAGING DIRECTOR		GENERAL MANAGER - RAW WOOL	
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A.B.N. 43 006 014 106		REPORT		ORIGINAL	
3-00200622-R3 GREASY WOOL		TEST METHOD IWTO-DTM-59		PAGE 2	
AWTA LTD MELBOURNE 10 BALES		TEST NUMBER		BALES NETT	
REF: AWTA		3-10790033-D8		1 188	
TEST RESULTS:		AWTA		FLPS	
1. ORGANOPHOSPHATE:		3-10790034-D9		1 188	
PROPYLPHOSPHOS		AWTA		AAAM	
DIAZINON		3-10790035-D0		1 188	
DICHLOFENTHION		AWTA		AAAM	
CHLORFENVINPHOS		3-10790036-D1		1 191	
CHLORPYRIPHOS		AWTA		AAAM	
COSMOPHOS #		3-10790037-D2		1 192	
FENCHLOPHOS		AWTA		AAA	
STIRION #		3-10790038-D3		1 193	
PIRIMPHOS METHYL #		AWTA		AAAXB	
MALATHION #		3-10790039-D4		1 194	
2. SYNTHETIC PYRETHROID:		AWTA		AAFX	
CYPERMETHRIN		3-10790040-D5		1 198	
CYHALOTHRIN		AWTA		AAALMS	
DELTAMETHRIN		3-10790041-D6		1 197	
FENVALERATE		AWTA		AAAPCS	
FLUMETHRIN		3-10790042-D7		1 200	
3. INSECT GROWTH REGULATOR:		AWTA		AAFXLMS	
DIFLUBENZURON					
TRIFLUMURON					
CYROMAZINE					
DICHLANIL					
SPINOSAD					
4. ORGANOCHLORINE:					
ALDRIN					
ALPHA BHC					
BETA BHC					
DELTA BHC					
GAMMA -BHC (LINDANE)					
DDD					
DDE					
DDT					
DIELDRIN					
ALPHA ENDOSULFAN #					
BETA ENDOSULFAN #					
ENDOSULFAN SULPHATE #					
ENDRIN					
HEPTACHLOR #					
HCB #					
# These chemicals are not included in the current EU-ECO LABEL standard 'Not Detected' denotes concentrations below the limit of reporting					
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