

Glossary of Key Terms

List of terms and their definitions

Mulesing & Mulesing Statuses

Mulesing	The removal of skin from the breech and/or tail of a sheep using mulesing shears . This one-time surgical procedure is performed to greatly reduce the lifetime risk of breech flystrike in sheep, a painful and, if left untreated, typically fatal condition caused by blowfly larvae (maggots) infestation.
Non-Mulesed (NM)	No sheep in the mob have been mulesed or treated with liquid nitrogen.
Liquid Nitrogen (LN)	A method that freezes the skin in the breech area using liquid nitrogen. The dead skin sheds naturally, creating a bare area. This is not considered mulesing.
Anaesthetic/ Analgesic (AA)	All sheep in the mob were mulesed using a registered pain relief product approved by the APVMA.* * The APVMA is the Australian Government regulator of agricultural and veterinary chemical products.
Mulesed (M)	Some or all sheep in the mob were mulesed without a registered pain relief product.
Ceased Mulesing (CM)	This is not a mob-level status – it is a property-level declaration. CM can only be used when: <ul style="list-style-type: none"> • No lambs born on the property have been mulesed for at least 12 months, and • No mulesed or AA-treated sheep have been introduced to the property during that time. Because CM applies to the entire property, it cannot be declared on a mob-by-mob basis.
Not Declared (ND)	Used when the grower chooses not to declare a mulesing status. The mob will be listed as Not Declared in sale catalogues and may be considered non-compliant under the NWD Integrity Program (NWD-IP).

Other Key Terms

Mob	A group of sheep that are managed together under the same conditions and share a consistent mulesing status. Mulesing declarations on the NWD are made mob-by-mob, except for Ceased Mulesing (CM), which is declared at the property level.
Mob Mulesing Status (MMS)	The declared status assigned to a specific group (mob) of sheep, reflecting the overall mulesing practices used within that group. Crucially, if a mob contains a mix of statuses (e.g., NM and M), the entire mob must be declared at the lowest applicable status according to this hierarchy to ensure accurate representation. Hierarchy: NM > LN > AA > M > ND.

The National Wool Declaration (NWD)

National Wool Declaration (NWD) A voluntary declaration completed by wool growers to declare key information about their wool clip, including mulesing status and contamination risk, supporting supply chain transparency.

NWD Integrity Program (NWD-IP)

NWD Integrity Program (NWD-IP) An independent, industry service delivered by AWEX to verify the accuracy of National Wool Declarations. It includes:

- NWD desktop audits of selected brands prior to sale
- AA/LN desktop verification audits of selected brands
- On-farm audits to verify NM/CM declarations of selected brands.

Third Party Auditors An independent, third-party auditing organisation engaged by AWEX to conduct on-farm audits as part of the NWD Integrity Program.

Non-Compliant If an audit finds that the declared mulesing status is inaccurate or cannot be verified, the NWD will be marked as non-compliant, and all parties, the grower, broker, buyer and AWTA (where required) will be notified.

Dark & Medullated Fibres (DMF)

Dark & Medullated Fibres (DMF) Contaminants that can reduce the value of a wool clip. Dark fibres come from coloured sheep, while medullated fibres are hollow and can affect the dyeing process.

- **Dark and Medullated Fibre (DMF)**
- **Dark Fibre** is a collective term for:
 - **Pigmented fibres** – naturally occurring black or coloured fibres under genetic control
 - **Urine-stained fibres** – caused by prolonged contact between wool and urine
- **Medullated fibres** are coarse fibres with an air-filled (hollow) core called a **medulla**
 - **Kemp** is a type of short medullated fibre

Dark and Medullated Fibre Risk (DMFR) Scheme

Dark and Medullated Fibre Risk (DMFR) Scheme A declaration made by the owner/manager regarding the risk of dark and/or medullated fibres being present in Merino fleece and piece wool. This helps downstream users assess the potential for contamination in processing.

Merino Dark & Medullated Fibre Risk (DMFR) Scheme for Fleece and Pieces

DMFR RATING			
DMFR Rating	Estimated No. dmf/kg top		
1	<50	CRUTCHED SHEEP 2 ND SHEARING – 8 YEARS	FLC → 1
2	50–100		PCS → 2
3	100–200		E & W FLC → 2
4	200–500		Wether PCS → 3
5	>500		Ewe PCS → 4
6	Shedding Breeds*		
• DMFR Ratings of 1 or 2 are suited to all end uses, including white or pastel fabric requiring low levels of dark fibre (less than 100 dark fibres/kg). • Ratings 3, 4 and 5 are suitable for non-sensitive end uses and can be included in dark coloured products. • DMFR Rating 6 wools may contain medullated fibres that cause problems for dark coloured fabrics and pigmented fibres that contaminate white or pastel products. * e.g. Afrikaner, Australian White, Awassi, Damara, Dorper, Karakul, Meatmaster, Persian, Van Rooy, Wiltipoll, Wiltshire Horn.		More than 3 months before shearing	FLC → 4
		Not crutched	PCS → 5
		Sheep more than 8 years	→ 5
		Mated, reared or run with shedding breeds* or their crosses	→ 6