

# Chemical Services – Advisory Note

## Thiourea

1. Section 87 of the NT ***Agricultural and Veterinary Chemicals (Control of Use) Act 2004*** requires the Chemical Coordinator to provide written directions to stop a specified action when it is necessary to protect the health of the public, the environment or the users of a chemical product, fertiliser or stock food.
2. Over the past 20 years the chemical substance Thiourea has been incorrectly used in the NT as a foliar sprayed fertiliser. Given the significant risk and impact to human health and environmental harm to waterways, the foliar use of Thiourea is banned in the Northern Territory.

## Classification

3. Thiourea is a Schedule 6 Poison – a harmful substances with a moderate potential for causing harm which can be reduced with strong warnings and safety directions on labels. Chem Alert classifies Thiourea an amber level Chemical Substance:

### Moderate Health Hazard with normal use

AMBER

User Check List:

- Read the SDS and ChemAlert report thoroughly before using the product.
- Clarify any concerns you might have about the product or its application.
- Is there a safer substitute?
- Is the area adequately ventilated?
- Does the area of application need to be isolated?
- Is air monitoring required to evaluate exposure levels?
- Have safe work practices or procedures been established?
- If PPE is specified, are workers experienced in its use?

## Harm

4. Toxicological information is available which indicates that “Thiourea is harmful if swallowed, skin contact may result in drying and defatting of the skin, rash and dermatitis and contact with the eyes may result in irritation, lacrimation, pain and redness. Of particular concern is that Thiourea is carcinogenic in humans and can cause reproductive issues including damaging unborn children”<sup>1</sup>.
5. Thiourea is toxic to aquatic life with long lasting effects; the chemical is water soluble and may spread if introduced into water systems. Therefore Thiourea must be prevented from entering drains and waterways.

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<sup>1</sup> Thermo Fisher Product Label and SDS

## Offences

6. The use and deployment of Thiourea through foliar spray equipment or associated activities constitutes an offence under Section 13 of the Agricultural and Veterinary Chemicals (Control of Use) Act 2004.

**13      Duty to ensure harm does not result from use of chemical products, fertilisers or stockfoods**

A person who uses a chemical product, fertiliser or stockfood must take all measures that are reasonable and practicable to ensure the use does not result in harm to:

- (a) the health of the general public;
- (b) the health of an animal;
- (c) the environment; or
- (d) domestic or export trade in agricultural produce.

Maximum penalty:      If the offender is a natural person –  
500 penalty units

If the offender is a body corporate –  
2 500 penalty units.

7. Furthermore a person who contravenes a direction by the Chemical Coordinator commits a further offence under Section 87 of the Agricultural and Veterinary Chemicals (Control of Use) Act 2004.

**87      Directions by Chemicals Coordinator**

- (1) The Chemicals Coordinator may give a person a written direction to take specified action, or to stop or not commence specified action, if the Chemicals Coordinator is satisfied on reasonable grounds that:

- (a) an offence against this Act has been, is being or is about to be committed; or
- (b) it is necessary to protect:
  - (i) the health of the general public or the users of a chemical product, fertiliser or stockfood or a class of chemical products, fertilisers or stockfoods;
  - (ii) the environment; or
  - (iii) domestic or export trade in agricultural produce.

- (2) A person who contravenes a direction given under subsection (1) commits an offence.

Maximum penalty:      If the offender is a natural person –  
200 penalty units.

If the offender is a body corporate –  
1 000 penalty units.

## Further Information

8. The attached Safety Data Sheet and Product Label provides further safety and handling information.