



# MATERIAL SAFETY DATA SHEET

## 1. IDENTIFICATION of SUBSTANCE

**Product Name:** Eco-DEF **Revision Date:** 1 April 2015

**Other Names:** Aqueous Urea Solution, AGU (Automotive Grade Urea)  
Nox Reducing Agent Aus - ISO 22241

Organisation	Location	Telephone
Spectrum Fluid Technologies	52 Buckler Rd WANGARATTA VIC 3677 AUSTRALIA	+61 (03) 5722 7588

<b>Poisons Information Centre - Australia</b>	13 11 26
<b>CHEMCALL AUSTRALIA</b>	1800 127 406

## 2. HAZARD IDENTIFICATION

Not Hazardous according to criteria of NOHSC/ASCC

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	%
Water	7732-18-5	67.5
Urea - NH <sub>2</sub> (2CO)	57-13-6	32.5

There are no other ingredients in this product, which within the current knowledge of the supplier in the concentration present in this product, are classified as hazardous to either health or the environment, that would require reporting in this section.

## **4. FIRST AID MEASURES**

**Eye Contact:**

Rinse opened eye immediately under running water. Seek medical advice if irritation occurs.

**Skin Contact:**

Avoid prolonged or repeated contact with skin. Remove any contaminated clothing and wash skin thoroughly with soap and water. Seek medical advice if irritation occurs.

**Ingestion:**

If large quantities of this product are ingested, seek medical attention immediately. Do not induce vomiting unless directed by a physician.

**Medical Attention:**

Treat symptomatically.

## **5. FIRE FIGHTING MEASURES**

**Flammability:**

Non-combustible material. Extinguishing media governed by other materials present.

**Hazardous thermal decomposition Products:**

Carbon Dioxide, Carbon Monoxide, Nitrogen Oxides, Ammonia.

**Precautions for fire fighters and****Special protective equipment:**

Fire Fighters to wear self contained breathing apparatus (SCBA) and suitable protective clothing

**Suitable extinguishing media:**

Water spray, foam, dry chemical or CO<sub>2</sub>:

## **6. ACCIDENTAL RELEASE MEASURES**

**Emergency Procedures:**

Eliminate all sources of ignition.

Avoid spilled product entering waterways or coming into contact with soils.

If contamination of waterways or sewers has occurred, advise the EPA or your local waste management authority.

**Methods and materials for containment and clean up.**

Absorb with DRY sand or other non-combustible material.

Wear protective equipment to prevent dust inhalation. Contain and sweep/shovel up spills or use an industrial vacuum cleaner. Seal in properly labelled container for disposal.

## **7. HANDLING AND STORAGE**

### **Precautions for safe handling:**

Wear protective clothing. Avoid skin and eye contact. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling.

### **Conditions for safe storage:**

Store in a cool, dry well ventilated place out of direct sunlight.  
Keep containers closed when not in use. Inspect regularly.

## **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

### **Exposure controls:**

Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Avoid generating and breathing in mist. Use with local exhaust ventilation or while wearing dust mask.

### **Personal Protective Equipment**

RESPIRATOR: If engineering controls are inadequate, wear an approved particulate respirator.

EYES: Recommended - Face shield or splash safety glasses with side shields.

CLOTHING: Standard approved work uniform/clothing.

HANDS: Use chemical resistant, impervious gloves.

Always wash hands before smoking, eating, drinking, or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Clear liquid
<b>Odour</b>	Slight Ammonia Smell
<b>Specific Gravity</b>	1.09
<b>pH</b>	9.8 - 10
<b>Decomposition Temperature</b>	100°C
<b>Freezing / Melting Point</b>	-11.5°C
<b>Vapour Pressure</b>	6.4 kPa (at 40°C)

## **10. STABILITY AND REACTIVITY**

<b>Chemical Stability:</b>	Stable under normal ambient and recommended storage and handling conditions of temperature and pressure.
<b>Conditions to avoid:</b>	Urea will react with calcium or sodium hypochlorite to form explosive nitrogen trichloride
<b>Incompatible Materials:</b>	Strong oxidising agents, acids and alkalis.
<b>Hazardous Decomposition Products</b>	Carbon Dioxide, Carbon Monoxide, Nitrogen Oxides, Ammonia.

## **11. TOXOLOGICAL INFORMATION**

No adverse health effects expected if the product is handled in accordance with directions

<b>Chronic effects</b>	No known critical hazards or significant effects.
<b>Carcinogenicity</b>	No known critical hazards or significant effects.
<b>Mutagenicity</b>	No known critical hazards or significant effects.
<b>Teratogenicity</b>	No known critical hazards or significant effects.
<b>Fertility effects</b>	No known critical hazards or significant effects.
<b>Developmental effects</b>	No known critical hazards or significant effects.

### **Overexposure signs / symptoms**

<b>Ingestion:</b>	No known harmful result
<b>Eye Contact:</b>	May cause eye irritation.
<b>Skin Contact:</b>	May cause skin irritation.
<b>Inhalation:</b>	May result in respiratory irritation.

## **12. ECOLOGICAL INFORMATION**

<b>Ecotoxicity:</b>	Product does not display any bioaccumulation.
<b>Mobility:</b>	Soluble in water
<b>Environmental effects:</b>	Readily Biodegradable

## **13. DISPOSAL CONSIDERATIONS**

### **Disposal Methods**

Dispose of any unused product through a licensed waste contractor, in accordance with local, state and federal regulations. This product is not defined as a hazardous waste.

## **14. TRANSPORT INFORMATION**

**This product is not restricted by any dangerous goods regulation. Road, Rail, Marine and Air transport are all viable modes of transport.**

**Shipping Name:** Eco-DEF

**UN No.** Not allocated.

## **15. REGULATORY INFORMATION**

**Poisons Schedule:** None allocated

**Risk Phrases** Not Classified

## **16. OTHER INFORMATION**

### **Supplier of Material Safety Data Sheet:**

Spectrum Fluid Technologies

52 Buckler Rd WANGARATTA VIC 3677

Ph: 03 5722 7588 Fax: 03 5721 6333

*This MSDS summarises Spectrum Fluid Technologies best knowledge of the health and safety hazard information of the specific substance and uses described in it, as at the date of issue. The information it contains is given for safety guidance purposes and relates only to the specific substance and uses described in it. Each user should read the MSDS and consider the information in the context of how the selected substance will be handled and used in the workplace including its use in conjunction with other substances. All substances may present unknown hazards and should be used with caution. Spectrum Fluid Technologies expressly disclaims any liability for loss or damage resulting from the use of any data, information or recommendations set out in this Material Safety Data Sheet.*