

## SAFETY DATA SHEET

### 1. IDENTIFICATION OF THE SUBSTANCE, PREPARATION AND COMPANY

Product Landowner Blue (AdBlue®)  
Company Landowner Products Limited  
Farley  
Much Wenlock  
Shropshire  
TF13 6NX  
Tel 01952 727754



### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Composition Urea  
Concentration 32.50%  
CAS No 57-13-6  
EINECS No 200-315-5  
Further Information Aqueous solution of Urea

### 3. HAZARD IDENTIFICATION

Main Hazard No specific hazards related to the product

### 4. FIRST AID MEASURES

First Aid - Eyes Rinse immediately with plenty of water, also under eye lids for at least 15 minutes, If symptoms persist, seek medical advise  
First Aid - Skin Wash off with plenty of water, remove contaminated clothing  
First Aid - Ingestion Rinse mouth with water, drink plenty of water. Do not induce vomiting  
Seek medical Advice  
First Aid - Inhalation Move to fresh air

### 5. FIRE FIGHTING MEASURES

Extinguishing Media The product does not burn.  
Special Hazards In A Fire Heating can release hazardous gases (Nox, HCN, NH<sup>3</sup>)  
Protective Equipment for Fire Fighting Self contain breathing apparatus, splash protection

### 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Avoid contact with skin & eyes. Slip Hazard  
Environmental Precautions Prevent product from entering drains and surface ground water  
Measures For Clean Up Take up mechanically and collect in suitable containers for disposal. Dispose of in compliance of local & national regulations.  
After cleaning flush away traces with water

### 7. HANDLING AND STORAGE

Safe Handling Advice Avoid contact with skin & eyes  
Storage Keep containers tightly closed in a dry and cool place  
Keep away from strong oxidising agents  
(permanganates, chromates, nitrates, nitrites, chlorine, & hydrochlorides)

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits No specific exposure limit determined for substance  
Occupational Exposure Controls Avoid contact with skin & eyes. Wash hands before breaks and immediately after handling product  
Hand Protection PVC, Latex, or other plastic material/rubber gloves  
Do not wear leather gloves

Eye Protection	Goggles
Skin & Body Protection	Do not wear leather shoes
<b>9. PHYSICAL &amp; CHEMICAL PROPERTIES</b>	
Physical State	Liquid, clear, colourless - yellowish possible slight ammonia odour
pH	10 (10% solution)
Boiling Point/Range	103°C
Flash Point	Not Applicable
Explosive Properties	
Lower Explosion Limit	Not Applicable
Upper Explosion Limit	Not Applicable
Vapour Pressure	No data available
Relative Density	1.09g/ml (20°C)
Solubility	
Water Solubility	Fully Soluble
Fat Solubility (Solvent - Oil to be Specified)	No data available
Partition Co-Efficient (n-octane water)	Urea: Log Pow = -2.59 (20-25°C)
Viscosity	ca 1.4 mPa.s (25°C)
Further Information	Crystallization temperature = -11°C
<b>10. STABILITY AND REACTIVITY</b>	
Hazardous Decomposition Product	Strong oxidizing agents, (permanganates, chromates, nitrates, nitrites, chlorine, hypo chlorine.) Heating can release hazardous gases
<b>11. TOXICOLOGY INFORMATION</b>	
Acute Oral Toxicity	LD50/Oral/Rat = 14300mg/kg
Skin Irritation	LD50/Oral/Mouse = 11500mg/kg
Eye Irritation	May cause skin irritation
Gentoxicity In Vitro	Urea has not caused sensitisation on laboratory animals No adverse health effects are known or expected under normal use
<b>12. ECOLOGICAL INFORMATION</b>	
Aquatic Toxicity	LC50/96h/Barilius barna > 9100mg/l LC50/24h/daphnia > 10000 mg/l
Mobility	Water Soluble. Absorption to soil is low
Biological Degradability	Biodegradable
Bio Accumulative Potential	Accumulation is unlikely, log Pow (urea) = 2.59
<b>13. DISPOSAL CONSIDERATIONS</b>	
Product Disposal	in accordance with local & national regulations
<b>14. TRANSPORT INFORMATION</b>	
Not Classified	
<b>15. REGULATORY INFORMATION</b>	
Not Classified	
<b>16 OTHER INFORMATION</b>	