

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
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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 ³)
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
9. PHYSICAL & CHEMICAL PROPERTIES	
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
10. STABILITY AND REACTIVITY	
Hazardous Decomposition Product	Strong oxidizing agents, (permanganates, chromates, nitrates, nitrites, chlorine, hypo chlorine.) Heating can release hazardous gases
11. TOXICOLOGY INFORMATION	
Acute Oral Toxicity	LD50/Oral/Rat = 14300mg/kg
Skin Irritation	LD50/Oral/Mouse = 11500mg/kg
Eye Irritation	May cause skin irritation
Gentotoxicity In Vitro	Urea has not caused sensitisation on laboratory animals No adverse health effects are known or expected under normal use
12. ECOLOGICAL INFORMATION	
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
13. DISPOSAL CONSIDERATIONS	
Product Disposal	Not in accordance with local & national regulations
14. TRANSPORT INFORMATION	
Not Classified	
15. REGULATORY INFORMATION	
Not Classified	
16 OTHER INFORMATION	