

# MSDS AMMONIUM SULPHATE

## 1. PRODUCT COMPOSITION

AMMONIACAL NITROGEN	21%
WATER SOLUBLE SULPHUR	24%
WATER SOLUBLE SULPHURTRIOXIDE	60%
FREE SULPHURIC ACID	max. 0.2%
TOC	max. 0.1%
WATER	max. 0.2%
PH	ca. 5.0
SIEVE ANALYSIS	
FRACTION	Smaller than 1.7mm: 5% Greater than 1.7mm: 95%
MEAN PARTICLE SIZE	≥2.0mm
BULK DENSITY	ca. 1010 kg/m <sup>3</sup>
STOWAGE FACTOR	ca. 0.98 m <sup>3</sup> /ft
COLOUR	White/yellow-brown

## 2. REMARKS

### SAFETY

**Fire:** Solid fertilizers are stable and only begin to decompose at temperatures higher than 200 °C (Urean decomposes only at temperatures higher than 290°C). The product cannot ignite, although nitrate-bearing products do sustain combustion. Urean may contain crystallized urea nitrate, which is capable of detonating. On exposure to fire, fertilizers may give off toxic fumes such as nitrogen oxides; ammonium sulphate gives off ammonia and sulphur dioxide vapours). A fire should be extinguished with water.

**Storage:** Solid fertilizers should be stored away from strong bases (such as unslaked lime, cement and ground metal slag), strong acids (such as hydrochloric acid and sulphuric acid), organic substances (such as oil, grease, sawdust, grains, seeds and grass), chromates, zinc, copper, nickel and cobalt alloys. Urean must be kept away from nitric acid (formation of urea nitrate poses a detonation hazard in equipment when friction or impacts occur).

**Transport:** There are no specific regulations for fertilizers from Kingsberg.

### HEALTH

Fertilizers may irritate the skin and the eyes. Use personal protective equipment (gloves and overall) to avoid contact with the skin and eyes. Following exposure, rinse your eyes and wash your skin with plenty of water. Ingestion may cause a soar throat, abdominal pain and nausea. Following ingestion, drink plenty of water and do not attempt to induce vomiting. When handling fertilizers, avoid eating, drinking and smoking.

### ENVIRONMENT

Fertilizers are readily degradable in the environment but are harmful to aquatic organisms. Avoid release to surface waters. Ensure that adjustments on spreaders and dosing machines are correct. Collect and remove spills where possible.

