

Product specification

Ammonium sulphate

Edition: 02

Issued: 2004-08-30

Application/use

- Fertilizer
- Removal of moss in lawns (dose max 50 g/m²).
- Water cleaning
- Hardener for glue

Characteristics

Ammonium sulphate is a colourless salt that easily dissolves in water. During dissolving a small amount of foam is formed. The salt react slight acidic. Molecular weight 132,14 g/mol.

Origin

Ammonium sulphate is produced from coke oven gas at SSAB Oxelösund, Sweden. The ammonia in the gas is absorbed in sulphuric acid and in that way Ammonium sulphate is formed.

Handling and storage

Ammonium sulphate should be stored dry. When stored for long time, lumps may occur. In presence of strong bases, gases as SO_x, NO_x and ammonia will be emitted. Many metals, e.g. iron and zinc, are affected by Ammonium sulphate in combination with moisture. Aluminium and stainless steel are fairly inert in the reaction with Ammonium sulphate.

Health- and environmental precautions

See Material Safety Data Sheet.

Quality assurance

Regular control of chemical composition and grain size distribution.

MEROX

- A member of the SSAB Group -

Chemical composition , average values

		weight %
Ammonium sulphate	(NH ₄) ₂ SO ₄	>99
Nitrogen	N	21
Sulfur	S	24
Free acid	H ₂ SO ₄	0,05
		ppm ¹⁾
Mineral oil ²⁾		4
Water insoluble residue		100
Residue of heat of ignition		100
Calcium	Ca	<80 ³⁾
Phosphate	PO ₄ ³⁻	<10 ³⁾
Nitrate	NO ₃ ⁻	<0,50 ³⁾
Chloride	Cl ⁻	<194 ³⁾
Lead	Pb	2,25
Cadmium	Cd	<0,01
Copper	Cu	<0,1
Chromium	Cr	0,560
Mercury	Hg	<0,04
Nickel	Ni	0,278
Zinc	Zn	<2

1) ppm = mg/kg

2) Hydraulic oil as Swedish standard SH46.

3) Higher detection limits than earlier analysis

**SSAB Merox AB**

SE-613 80 Oxelösund, Sweden

Telephone: +46 155 25 44 00

Telefax: +46 155 25 52 21

www.merox.se

Product specification

Ammonium sulphate

Edition: 02

Issued: 2004-08-30

**Grain size distribution
(average values)**

0-0,5 mm	2%
0,5-1 mm	60%
1-1,5 mm	36%
> 1,5 mm	2%

DensityLoose approx. 1,04 kg/dm³Packed approx. 1,13 kg/dm³**Amount of soluble Ammonium sulphate in water**

Temperature °C	Soluble amount g/dm ³	g/dm ³ solution	weight %
0	701	512	41,3
10	727	523,5	42,1
20	754	535	43,0
30	782	546	43,9
40	812	558	44,8
50	843	571	45,7
60	874	582	46,6
70	907	593,5	47,6
80	941	605	48,5
90	978	617	49,4
100	1017	629	50,4

weight %	g/dm ³ solution	Density, kg/m ³
1	10	1004
2	20	1010
4	41	1022
6	62	1034
8	84	1045
10	106	1057
15	163	1088
20	223	1115
30	352	1172
35	420	1200
40	491	1228

Density at 20°C

MEROX

- A member of the SSAB Group -

SSAB Merox AB

SE-613 80 Oxelösund, Sweden

Telephone: +46 155 25 44 00

Telefax: +46 155 25 52 21

www.merox.se