

PRODUCT DATA SHEET					
Product Identification	Latest Revision Date	Version	Page		
Potassium Nitrate Agriculture Grade NPK 13 0 46	24 March 2016	2	1/1		
1. PRODUCT IDENTIFICATION					
Product name	:	Potassium Nitrate 13 0 46			
Chemical Formula	:	KNO ₃			
Molecular Weight	:	101,102			
2. PHYSICAL PROPERTIES					
Physical state, form and colour	:	White and hygroscopic crystals or prills			
Bulk density	:	Crystals 1100 kg/m ³ / Prills 1200 kg/m ³			
Melting point	:	333 °C (606,15 K)			
Solubility in water	:	31 kg/100 kg in water at 20 °C (293,15 K)			
3. CHEMICAL PROPERTIES					
Guaranteed		Crystals	Prills		
Purity	:	97,6 %, min	97,6		
Nitrogen soluble in water (as N)	:	13 %, min	13 %, min		
Potassium soluble in water (as K ₂ O)	:	45,5 %, min	45,5 %, min		
Chloride (as Cl)	:	0,6 %, max	0,6 %, max		
Typical					
Nitrogen soluble in water (as N)	:	13,5 %	13,5 %		
Potassium soluble in water (as K ₂ O)	:	46 %	46 %		
Sodium (as Na)	:	0,2 %	0,2 %		
Magnesium (as MgO)	:	0,2 %	0,2 %		
Calcium (as Ca)	:	<0,1 %	<0,1 %		
Perchlorate (as ClO ₄)	:	<0,01 %	<0,01 %		
Sulphate (as S)	:	<0,2 %	<0,2 %		
Water insolubles	:	<0,05 %	<0,05 %		
4. TYPICAL SIZE DISTRIBUTION					
Crystals			Prills		
mm	U.S. mesh	% on sieve	mm	U.S. mesh	% on sieve
1,000	+16	2,5	3,36	+6	2,3
0,500	+32	14,9	2,38	+8	25,2
0,354	+42	33,4	1,68	+10	72,2
0,250	+60	65,0	1,19	+14	98,7
0,177	+80	86,9	1,00	+16	99,6
0,125	+115	95,9			
0,088	+170	99,5			
5. PACKAGING					
25 kg net in PE bag . Top open mouth. Thermo fused closure at the top					
25 kg net in PP outer bag and PE inner bag. Top open mouth					
50 kg net in PP outer bag and PE inner bag. Top open mouth. Only special customer request					
1000 kg net in maxi bags. Outer bag: woven PP and inner bag: PE. Only special customer request					
6. HANDLING AND STORAGE					
Keep in a tightly closed container. Store in a cool, dry, ventilated and low fire risk area, away from sources of heat or ignition.					
Protect the container against physical damage. Store separately from combustible and reducing materials					
7. TRANSPORT INFORMATION					
Description	:	Potassium Nitrate			
CAS N°	:	7757-79-1			
UN identification number	:	UN 1486			
Hazard class or Division	:	5.1			
PG (Packing Group, UN)	:	III			