

PRODUCT DATA SHEET

POTASSIUM NITRATE CRYSTAL GRADE NPK 13 0 46	LATEST REVISION DATE 24.September 2020	VERSION 2			
1. PRODUCT IDENTIFICATION					
Product name	Potassium Nitrate 13 0 46				
Chemical Formula Molecular Weight	KNO ₃ 101.102				
2. PHYSICAL PROPERTIES					
Physical state, form and colour	White hygroscopic crystals or prills				
Bulk density kg /m3	Crystals 1100 / Prills 1200				
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 % min			
Nitrogen soluble in water (as N)	13.0 % min	13.0 % 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) Sulphate (as S)	<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

25kg 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

50kg net in PP outer bag and PE inner bag. Top open mouth. Only special customer request

1000kg 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

8. ANTI CAKING AGENT

Galoryl - Rate is 2.5kg per Metric Tonne

ACA is added as standard and can be supplied without on request.