

Technical data sheet

FM #: FM lab 49

Rev: A/(Related to Handbook revision 4)

STANDARD POTASSIUM NITRATE "Kemapco" - (NOP) 13-0-46

TECHNICAL SPECIFICATION

1. TYPICAL ANALYSIS :

Jordan Quality Mark Certificate No. JQM121201

| CHARACTERISTICS | UNIT | TYPICAL | GUARANTEED |
|-------------------------|--------------------|-------------|------------|
| Purity KNO ₃ | w/w % | 99 | 99 |
| K | w/w % | 38.3 | min 37.6 |
| K ₂ O | w/w % | 46.2 | min 45.3 |
| NO ₃ - N | w/w % | 13.7 | min 13.0 |
| Cl | w/w % | 0.05 | max 0.2 |
| Na | w/w % | 0.05 | max 0.15 |
| Ca | w/w % | 0.05 | max 0.2 |
| P | w/w % | 0.01 | max 0.03 |
| Perchlorate | ppm | <0.1 | max 0.1 |
| Hypochlorite | ppm | ND | |
| Nitrite | ppm | ND | |
| Heavy metals | ppm | < 10 | < 10 |
| Cd | w/w % | < 0.0002 | max 0.0002 |
| Pb | w/w % | < 0.0005 | max 0.0005 |
| Water insolubles | w/w % | 0.01 | max 0.05 |
| Anticaking agent | w/w % | 0.1-0.15 | max 0.15 |
| Bulk density loose | t / m ³ | 1.00 - 1.19 | max 1.2 |
| pH | | 6.0-8.0 | max 9 |

| SIEVE ANALYSIS | µm | CUMULATIVE w / w % |
|----------------|-----|-----------------------|
| | 650 | 10 |
| | 350 | 50 |
| | 170 | 90 |
| | 130 | 95 |
| | 80 | 99 |

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2. ANALYTICAL METHODS :

| CHARACTERISTICS : | METHODS : |
|--------------------------|--|
| K | ASTM 2011 vol 11.01 D4192-08 |
| N | Standard method for the Examination water & waste water 21st edition (4 – 120) |
| Cl | A ASTM 2011, vol 11.01, D512-10 |
| Na | AOAC 2005, 18th Edition, method 974.01 ch 2 page 39 (2.6.26) |
| Ca | AOAC 2005, 18th Edition, Method 965.09 ch 2, p 29 |
| P | AOAC 2005, 18th Edition, Method 958.01, Chapter 2, p.6 |
| Heavy metals | ASTM 2011 vol 11.01 D3557-02-D, D3559-08-D |
| Humidity | AOAC 2005, 18th Edition, Method 950.01, Chapter 2, p.4 |
| Water insolubles | AOAC 2005, 18th Edition, Method 925.55 - C |
| Anticaking agent | UV spectrophotometry determination 284 nm |

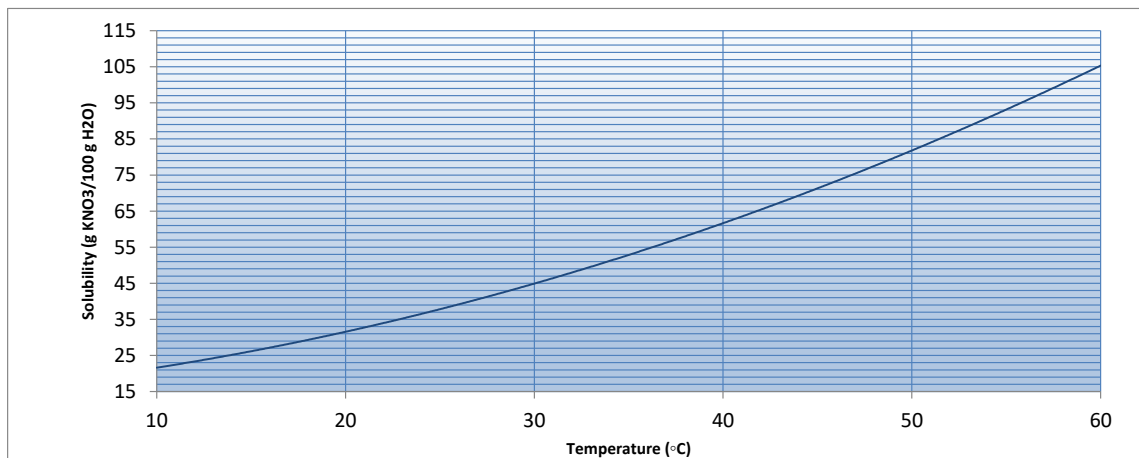
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TECHNICAL SPECIFICATION

3. GENERAL PROPERTIES :

| | | |
|---------------------------|---------------------------|---|
| Form: | Crystalline Powder | |
| Colour: | White. | |
| Solid Density: | 2.1 | t / m ³ |
| Melting Point: | 333 | ° C |
| Decomposition Point: | Approx. 400 | ° C |
| Specific Heat, 25 °C: | 0.22 | Cal / g . ° C |
| Heat of Fusion: | 28 | Kcal / kg |
| Heat of Dissolution: | -85 | Kcal / kg |
| Solubility limit at 20°C: | 317 | g KNO ₃ / L H ₂ O |

Solubility curve g KNO₃ /100 gH₂O :



4 . PACKING / STORAGE :

1200 Kg, 1000 Kg, 500 Kg, or 25 kg bags.
1000 kg net shrink-wrapped pallet.

Potassium Nitrate is a hygroscopic product sensitive to moisture and big temperature variations. In order to avoid any risk of caking or product deterioration, Potassium Nitrate must only be stored in a dry, ventilated and covered area.

5. USES :

Direct application, NPK and NK granulation or ammoniation, NPK and NK bulk blending, liquid and suspension fertilizers, fertigation (sprinkler, mini sprinklers and drip irrigation), foliar sprays, foliar NPK fertilizers, starter and transplant solutions, winter hardener, winter breaking dormancy sprays, flowering inducement sprays.

6 . CROPS :

Flowers, vegetables, strawberries, potted plants, soilless culture, (in door and out door), tobacco, potatoes, fruit trees, grapes, citrus, pineapples, cotton, bananas, mango, olives, home gardens, lawns.

7 . PRODUCTION SITE :

Arab Fertilizers & Chemicals Industries Ltd.

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COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY SGS
=ISO 9001=

