

# Material Safety Data Sheet

Date: 2003/01/23

Rev. 2015/07/10

MSDS No. 0023

1. Chemical name and Manufacturer	Product name: Potassium Nitrate 1M Solution Company Name: Kyoto Electronics Manufacturing Co., Ltd. Address: 56-2 Ninodan-cho, Shinden, Kisshoin, Minami-ku, Kyoto-City Department: Quality Assurance Division Phone Number: +81-75-691-4125 FAX Number: +81-75-691-9536														
2. Composition, Properties	Single product or mixture: Single (solution) Composition: <table border="1" data-bbox="432 595 1445 696"> <thead> <tr> <th rowspan="2">Component</th> <th rowspan="2">Content</th> <th rowspan="2">Chemical formula</th> <th colspan="2">Official Reg. No.</th> <th rowspan="2">CAS No.</th> </tr> <tr> <th>Chem.</th> <th>UN No.</th> </tr> </thead> <tbody> <tr> <td>Potassium Nitrate</td> <td>101.1g/L</td> <td>KNO<sub>3</sub></td> <td>1-449</td> <td>-</td> <td>7757-79-1</td> </tr> </tbody> </table>	Component	Content	Chemical formula	Official Reg. No.		CAS No.	Chem.	UN No.	Potassium Nitrate	101.1g/L	KNO <sub>3</sub>	1-449	-	7757-79-1
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Potassium Nitrate	101.1g/L	KNO <sub>3</sub>	1-449	-	7757-79-1										
3. Hazard Identification	Classification : N/A														
4. First aid measures	When contact the eyes : Immediately flush eyes with clean running water for at least 15 minutes and get medical attention. When contact the skin : Immediately flush skin with soap and water for at least 15 minutes. Ingestion : Get medical aid immediately.														
5. Firefighting measures	How to put off : Cool containers with flooding quantities of water until well after fire is out. Extinguishing media : Since the dried product residue of this material is a strong oxidizer, irritating and highly toxic gases may be generated by thermal decomposition or combustion during a fire. Use water spray to keep fire-exposed containers cool.														
6. Accidental release measures	Wipe it off immediately when it is spilt on a floor or the like and store it in the container with a lid for preserving waste materials. The remaining liquid should be washed off with plenty of water.														
7. Handling and storage	Handling : Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid contact with clothing and other combustible materials. Avoid breathing spray or mist. Do not allow to dry on clothing. Drying on clothing or other combustible materials may cause fire. Storage : Store it in a cool, dry and dark place without direct sunlight and air contact. Do not store near combustible materials or water. The remains after opening the seal should be stored in a well-closed container.														
8. Exposure control/Personal protection	Exposure limits : N/A Permissible concentration : N/A Facilities : Provide local ventilation. Protective gear : Wear protective gloves, glasses, dust mask and clothing.														
9. Physical and Chemical properties	Appearance : Colorless liquid      Vapor pressure : - Boiling point : -      Specific gravity : - Melting point : -      Volatility : - Solubility : Soluble in water      Other information : -														
10. Stability and Reactivity	Flash point : -      Explosion limits : - Flammability : -      Stability/Reactivity : Stable under normal														

	temperature and pressure
11. Toxicological information	<p>No data for the solution (only for KNO<sub>3</sub>)</p> <p>Skin corrosion: Avoid direct contact. Wear protective gloves, glasses and dust mask during work. Provide local ventilation for a dusty place. Exhaust air should be collected in a rinse tower, back-up filter or the like.</p> <p>Irritation : No Data</p> <p>Sensitivity : No Data</p> <p>Acute toxicity : Intravenous Cat, LD50 100mg/kg 8,000 to 39,000mg (fatal to death)</p> <p>Subacute toxicity : No Data</p> <p>Chronic toxicity : 5 to 30g in drinking water (0.7 to 40g/kg/day) Reproductive effect, rat</p> <p>Cancer effect : No Data</p> <p>Situs perversus: (virus, abnormal chromosome): No Data</p> <p>Reproductive effect: No Data</p> <p>Teratogenicity: No Data</p> <p>Other effects (including toxic gas generation by reaction with water): No Data</p>
12. Ecological information	<p>Biodegradability: No Data</p> <p>Persistence : No Data</p> <p>Fish toxicity : No Data</p>
13. Disposal considerations	Wipe it off immediately when it is spilt on a floor or the like and store it in the container with a lid for preserving waste materials. The remaining liquid should be washed off with plenty of water.
14. Transport information	Handle with care to avoid breakage of the container. Avoid an elevated temperature during transportation.
15. Regulatory information	<p>Fire laws: Hazardous material Class 1; Oxidizing material Class 3 (Designated quantity: 1,000kg)</p> <p>Water Pollution Control Law: Nitrate nitrogen is listed by some local authorities.</p>
16. Other information	<p>Reference materials:</p> <p>MSDS No.28703 (Nacalai Tesque Ltd.)</p>

- Since the evaluation of risk and toxicity is not established yet, the substance must be handled with an utmost care.
- The described physical or chemical amount or contents herein is not guaranteed.
- The preceding precautions are intended for use under normal conditions and not in an extraordinary case.