
SECTION 1: Identification of substance/mixture and of the company

Identification of the substance or mixture

Product name NanoSpark GROW-NK Soluble Activator

Company Identification

Nanotein Technologies
2950 San Pablo Ave
Berkeley CA 94702
United States
Toll Free: +1 (866)-828-2355

FOR RESEARCH USE ONLY. Not for use in diagnostic procedures.

SECTION 2: Hazards Identification

GHS Classification

Signal Word

None

Hazard Pictograms

None

Health Hazards

Not Hazardous

Physical Hazards

Not Hazardous

Environmental Hazards

Not Hazardous

Hazard Statements

Not Applicable

Precautionary Statements

Prevention

Not Applicable

Response

Not Applicable

Storage

Not Applicable

Disposal

Not Applicable

Other Hazards

Not Applicable

HMIS

Health	0
Flammability	0
Reactivity	0

SECTION 3: Composition/Information on ingredients

This product contains no substances that are considered hazardous to health at the given concentration. However, it is recommended to handle all lab chemicals with caution.

Component	CAS-No	Weight %
Water	7732-18-5	> 90 %
Glycerol	56-81-5	< 10 %
Sodium Chloride	7647-14-5	< 1 %
Sodium Phosphate Dibasic	7558-79-4	< 1 %
Dihydrogen Potassium Phosphate	7778-77-0	< 1 %
Potassium Chloride	7447-40-7	< 1 %

Section 4: First-aid Measures

Description of first-aid measures

Ingestion Rinse mouth with water. Then, drink plenty of water. If symptoms occur contact a physician.

Inhalation Breathe fresh air. If symptoms occur seek medical attention.

Eye Contact Rinse eyes immediately with water. Remove contact lenses. Rinse for 15 minutes. If symptoms occur contact a physician.

Skin Contact Wash immediately with plenty of water for a minimum of 15 minutes. Seek medical attention if symptoms occur.

Most Important Symptoms and effects None

Notes to Physicians Treat symptomatically

Section 5: Fire-fighting measures

Unsuitable Extinguishing Media No information available

Flash Point No information available
Method No information available

Autoignition Temperature No information available

Explosion Limits
Upper No data available

Lower Sensitivity to Mechanical Impact No data available
Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Combustion Products

Oxides of phosphorus. Hydrogen chloride gas.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand. MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical Hazards
1	0	0	N/A

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation
Always wear recommended Personal Protective Equipment
Use personal protection equipment
See Section 8 for more information

Environmental precautions

No special environmental precautions required

Methods and material for containment and cleaning up

Soak up with inert absorbent material

Reference to other sections

See Section 8 for more information

Section 7: Handling and Storage

Precautions for safe handling

Use Personal Protective Equipment as required. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation.

Conditions for safe storage, including incompatibilities

Keep in a cool, dry and well-ventilated place. Keep in properly labeled containers.

Specific end use(s)

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Section 8: Exposure Controls and Personal Protection

Control Parameters

Exposure Limits This product does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

Engineering Measures None under normal use conditions

Personal Protection Equipment**Eye/Face Protection**

Wear appropriate protection eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection

No protective equipment is needed under normal use conditions.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

Section 9: Physical and Chemical Properties

Physical State	Liquid
Appearance	Clear Colorless
Odor	No information available
Odor Threshold	No information available
pH	6.4
Melting Point/Range	No data available
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	No information available
Flammability (solid, gas)	Not applicable
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Specific Gravity	No data available
Solubility	No data available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available

Section 10: Stability and Reactivity

Reactive Hazard	None known, based on available information.
Stability	Stable under normal conditions.
Conditions to Avoid	No information available.
Possibility of hazardous reactions	Hazardous reactions have not been reported.
Incompatible materials	No dangerous reaction known under normal usage conditions.
Hazardous decomposition products	No data available.

Section 11. Toxicology Information

Product Information

Oral LD50 Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg
Dermal LD50 Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg
Vapor LC50 Based on ATE data, the classification criteria are not met. ATE > 20 mg/l

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	-	-	-
Sodium Chloride	LD50 = 3 g/kg (Rat)	LD50 > 10 g/kg (Rabbit)	LC50 > 42 g/m ³ (Rat) 1 hr
Sodium phosphate dibasic	LD50 = 17 g/kg (Rat)	Not listed	Not listed
Dihydrogen potassium phosphate	LD50 = 3200 mg/kg (Rat)	LD50 > 4640 mg/kg (Rabbit)	Not listed
Potassium chloride	LD50 = 2600 mg/kg (Rat)	Not listed	Not listed
Glycerol	LD50 = 27,200 mg/kg (Rat)	LD50 > 10,000 mg/kg (Rabbit)	Not listed

Toxicology Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

Sensitization No information available

Carcinogenicity No information available

Acute Toxicity No information available

Skin corrosion/irritation No information available

Serious eye damage/irritation No information available

Respiratory or skin Sensitization No information available

Specific target organ toxicity (STOT) – single exposure None known

Specific target organ toxicity (STOT) – repeated exposure None known

Germ cell mutagenicity No information available

Reproductive toxicity No information available

Aspiration hazard No information available

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated

Section 12: Ecological Information

Ecotoxicity

Component	Freshwater algae	Freshwater Fish	Microtox	Water Flea
Sodium Chloride	Not listed	Pimephals prome: LC50: 7650 mg/L/96h	Not listed	EC50: 1000 mg/L/48h
Potassium chloride	EC50 2500 mg/L/72h	Lepomis macrochirus: LC50: 1060 mg/L/96h Pimephales promelas: LC50: 750 – 1020 mg/L/96h	Not listed	EC50: 825 mg/L/48h
Glycerol	Not listed	54,000 mg/L/96h	Not listed	Not listed

Persistence and Degradability Miscible with water. Persistence is unlikely based on information available.

Bioaccumulation/Accumulation No data available.

Mobility Will likely be mobile in the environment due to its water solubility.

Section 13: Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Section 14: Transport Information

DOT (US) Not dangerous goods
IMDG Not dangerous goods
IATA Not dangerous goods

Section 15: Regulatory Information

SARA 302 Components Not applicable

SARA 313 Components Not applicable

SARA 311/312 Hazard Categories See Section 2 for more information

CWA (Clean Water Act)

Component	CWA- Hazardous Substances	CWA-Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Sodium phosphate dibasic	X	5000 lb	-	-

Clean Air Act Not applicable

OSHA – Occupational Safety and Health Administration Not applicable

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA RQs	EHS
Sodium phosphate dibasic	5000 lb	-	

California Proposition 65

This product does not contain any Proposition 65 Chemicals.

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Water	-	-	X	-	-
Sodium phosphate dibasic	X	X	X	-	-

U.S. Department of Transportation

Reportable Quantity (RQ) Y
 DOT Marine Pollutant N
 DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations**Mexico – Grade**

No information available.

Section 16: Other Information**Further information**

The above information is believed to be correct, but does not purport to be all inclusive and should only be used as a guide. The information provided in this document is based on our present knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Nanotein Technologies shall not be held liable for any damage resulting from the handling or from the contact with the above product.

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