



RegalGrow 18-0-0 KSN

SAFETY DATA SHEET

1. Identification

Product identifier RegalGrow 18-0-0 KSN
Other means of identification Urea Ammonium Nitrate Solution , NBNX Triazone SRN, NBPT and DCD
Recommended use Industrial Use
Recommended restrictions Animal Feed
Manufacturer/Importer/Supplier/Distributor information
Company Name Regal Chemical Co
600 Branch Drive
Alpharetta, Ga 30004
770-475-4837

Emergency For Chemical Emergency
Call CHEMTREC day or night
1.800.424.9300
Mexico - 1.800.681.9531
Outside USA/Canada
1.703.527.3887
(collect calls accepted)

2. Hazard(s) identification

Physical hazards May intensify fire; oxidizer
Health hazards Causes serious eye irritation.

OSHA defined hazards

Label elements



Hazard symbol

Signal word

Warning

Hazard statement

May intensify fire; oxidizer.

Precautionary statement

Causes serious eye irritation.

Prevention

Keep away from heat/sparks/open flames/ hot surfaces - No smoking. Take any precaution to avoid mixing with combustibles. Wear protective glove/eye protection/face protection.

Response

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do- continue rinsing. If eye irritation persists: Get medical advice/attention.

Storage

Dispose of contents/container in accordance with local/national regulations.

Disposal

Hazard(s) not otherwise classified(HNOC)

Supplemental information

3. Composition/information on ingredients

Substances

Not applicable

Mixture

Chemical name	CAS number	%
Total Nitrogen		18
SRN from Triazon Nitrogen		8.40
Soluble Potash (K ₂ O)		0.00
Sulfur (S)		0.00
N-(n-butyl)-thiophosphoric tramide (NBPT)		
Dicyandiamide DCD		

4. First-aid measures

Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention.
Skin contact	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Eye contact	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Ingestion	If the person is conscious, have them drink water or milk. Contact a physician immediately. Do not induce vomiting.
Most important symptoms/effects, acute and delayed	Contact with skin or eyes may cause irritation. Causes serious eye irritation.
Indication of immediate medical attention and special treatment needed	Seek medical attention if irritations persist.
General information	In all cases of doubt, or when symptoms persist, seek medical attention.

5. Fire-fighting measures

Suitable extinguishing media	Use media needed to control surrounding fire. Water content of product prevents ignition. The product can support combustion if water evaporates.
Unsuitable extinguishing media	
Specific hazards arising from the chemical	Hazardous decomposition: Combustion: oxides of nitrogen and carbon, ammonia, ammonium compounds, cyanide compounds, biuret. When the water in UAN evaporates, it leaves a residue of solid ammonium nitrate and urea; solid ammonium nitrate can explode.
Special protective equipment and precautions for firefighters	Avoid welding or burning on pipes, valves, or tanks, which have contained UAN solution until they have been thoroughly washed out. Residual ammonium nitrate may explode under conditions of confinement and high temperature.
Fire fighting equipment/instructions	Wear self-contained breathing apparatus and protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Put on appropriate personal protective equipment
Methods and materials for containment and cleaning up	EMERGENCY ACTION: Keep unnecessary people away, and isolate hazard areas. SMALL SPILLS: Stop leak, if you can do so without risk. collect product for recovery and use as fertilizer. LARGE SPILLS: For release to land, contain discharge by constructing dyke's or applying inert absorbent. Keep out of streams. Check for contamination of drinking water supply. Notify applicable government authority if release is reportable or could adversely affect the environment.
Environmental precautions	Do not allow spills to enter drains or waterways. Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

7. Handling and storage

Precautions for safe handling	Handle containers carefully to prevent damage and spillage. May be toxic to cattle when ingested. Practically non-toxic to aquatic life.
Conditions for safe storage, including any incompatibilities	Store in a tightly closed container. Protect from freezing. Avoid heat, flames, sparks and other sources of ignition and do not allow material to become dry. Do not use zinc or copper alloys in contact with nitrogen solution. Avoid contact with combustible, organic or other readily oxidizable materials. Avoid contact from urea nitrate when mixed with nitric acid at low pH; urea nitrate may become unstable and/or explosive under certain conditions.

8. Exposure controls/personal protection

Urea	No established limits	NBNX	No established limits	DCD	No established limits
Ammonium nitrate	No established limits	NBPT	No established limits		

Biological limit values Exposure guidelines	No biological exposure limits noted for the ingredient. Follow standard monitoring procedures.
Appropriate engineering controls	Provide adequate ventilation.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear splash goggles, if exposed to splashing liquids.
Skin protection	Suitable clothing to minimize skin contact are recommended.
Hand protection	Rubber gloves
Other	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
Respiratory protection	If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.
Thermal hazards	
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state	Liquid
Form	Liquid
Color	May be clear or green

Odor It may have a faint to pungent ammonia odor

Odor threshold Not determined

pH 6.5-7.5 data available

Melting point/freezing point Not measured

Initial boiling point and boiling range > 100 °C

Flash point Not measured

Evaporation rate Not measured

Flammability (solid, gas) Not applicable

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not measured

Flammability limit - upper (%) Not measured

Explosive limit - lower (%) Not measured

Explosive limit - upper (%) Not measured

Vapor pressure

Vapor density Not measured

Relative density Not measured

Solubility(ies)

Solubility (water) 100%

Partition coefficient (n-octanol/water) Not measured

Auto-ignition temperature Not measured

Decomposition temperature Not measured

Viscosity Not measured

10. Stability and reactivity

Reactivity	Hazardous polymerization will not occur.
Chemical stability	Stable under normal circumstances.
Possibility of hazardous reactions	No data available
Conditions to avoid	No data available
Incompatible materials	Avoid contact with combustible, organic or other readily oxidizable materials. Avoid contact from urea nitrate when mixed with nitric acid at low pH; urea nitrate may become unstable and/or explosive under certain conditions.
Hazardous decomposition products	

11. Toxicological information

Information on likely routes of exposure

Inhalation	No specific data available
Skin contact	
Eye contact	
Ingestion	

Symptoms related to the physical, chemical and toxicological characteristics

Information on toxicological effects

Acute toxicity

Product	Species	Test Results
Ammonium nitrate		Not applicable
NBXN Triazone		Not applicable
NBPT		Not applicable
DCD		Not applicable

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

Respiratory or skin sensitization

Respiratory sensitization

No data available

Skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

Reproductive toxicity

This product is not considered to be a carcinogen by IARC,ACGIH,NTP, or OSHA

Aspiration hazard

No data available

Chronic effects

Not available

Further information

No other specific acute or chronic health impact noted.

12. Ecological information

Ecotoxicity

Harmful to aquatic life..

Components

Species

Test Results

Ammonium nitrate (6484-52-2)

Aquatic

Fish	LC50	Piscis
Crustacea	EC50	

100mg/l, 96 hours
490 mg/l, 48 hours

Urea (57-13-6)

Aquatic

Fish		Piscis
Crustacea		Daphna magna

6810 mg/l 96 hours
22998 mg/l 48 hours

NBPT

Aquatic

Fish		Fish
Crustacea		Daphnia

1,140 mg/l, 96 hours
290 mg/l, 48 hours

Persistence and degradability	When release to silo, urea will hydrolyze into ammonium in a matter of days to several weeks. When released into water, this material may biodegrade to a moderate extent. When released into water, urea is expected to evaporate significantly bioaccumulation. When released into the air, urea is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, urea is expected to have a half-life of less than 1 day.
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Bioaccumulative potential	Not measured
Mobility in soil	
Other adverse effects	

13. Disposal considerations	
Disposal instructions	No data available No data available
Hazardous waste code	Whatever cannot be saved for recovery or recycling should be managed in appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.
Waste from residues / unused products	
Contaminated packaging	

14. Transport information	DOT	IMO	ICAO/IATA
UN number	Not applicable	Not regulated	Not regulated
UN proper shipping name	Not regulated	Not regulated	Not regulated
Transport hazard class	Not applicable	Not applicable	Not applicable
Packing group	Not applicable	Not applicable	Not applicable
Environmental hazards			
IMDG	Marine pollutant: NO		
Special precautions for user	No further information		
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established		

15. Regulatory information

US federal regulations	This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
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TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	Not regulated.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	Not listed.
CERCLA Hazardous Substance List (40 CFR 302.4)	Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - No
	Delayed Hazard - No
	Fire Hazard - No

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List	Pressure Hazard - No
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Clean Air Act (CAA) Section 112(r) Accident Prevention (40 CFR 68.130)	Not regulated.	SARA 302 Extremely hazardous substance	No
SARA 311/312 Hazardous			

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Total food additive
Direct food additive
GRAS food additive

US state regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

Not Listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 16-Dec 2021

Revision date -

Version # 01

Further information HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings Health: 2
Flammability: 0
Physical hazard: 0

NFPA ratings



List of abbreviations

LC50: Lethal Concentration, 50%.
LD50: Lethal Dose, 50%.

References EPA: Acquire database
HSDB® - Hazardous Substances Data Bank
RTECS

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