

SECTION 1: IDENTIFICATION

Product Name:	Growforce [™] KS32
EPA Reg. No.	N/A
Recommended Use:	Fertilizer – See product label for additional information
Restrictions on Use:	See product label for any restrictions on the use of this product.
Chemical Name:	N/A - mixture
Distributed by:	Vivid Life Sciences, LLC
	P.O. Box. 41632
	Minneapolis, MN 55441
For Medical Exposur	e Concerns, Contact the Poison Control Center: 1-800-222-1222

SECTION 2: HAZARD(S) IDENTIFICATION

EMERGENCY OVERVIEW: Clear colorless to light yellow liquid. May cause moderate but temporary eye irritation. May cause respiratory irritation upon inhalation.

OSHA HCS CLASSIFICATION (29 CFR 1910.1200)

Eye Damage/Irritation	Category 2A
Specific Target Organ Toxicity – Single Exposure	Category 3



▼			
Signal Word:	WARNING		
Hazard Statement(s):	Causes serious eye irritation.		
	May cause respiratory irritation.		
Precautionary Statement(s):	Prevention: Wash hands thoroughly after handling. Wear eye protection/face protection. Avoid breathing mist/vapors/spray. Use only outdoors or in a well-ventilated area.		
	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.		
	IF INHALED: Remove person to fresh air and keep comfortable for		
	breathing. Call a poison center/doctor if you feel unwell.		
	Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.		
	Disposal: Dispose of contents/container in accordance with Federal, state and local laws and regulations.		
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The following percentage of the mixture consists of components with unknown hazards regarding the acute toxicity:

- >95.0% Acute Oral Toxicity
- >95.0% Acute Dermal Toxicity
- 100.0% Acute Inhalation Toxicity
- >75.0% Eye Irritation
- >75.0% Dermal Irritation
- >75.0% Skin Sensitization



SECTION 3: COMPOSTION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight %
Potassium carbonate	584-08-7	*
Potassium thiosulfate	10294-66-3	*
Potassium citrate	866-84-2	*

*Ingredients not listed or listed with a weight % range are considered a trade secret and are withheld under 29 CFR 1910.1200(i).

SECTION 4: FIRST AID MEASURES		
IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call poison control center or doctor for treatment advice	
IF ON SKIN OR CLOTHING:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.	
IF INHALED:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice	
IF SWALLOWED:	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless told to do so by a poison control center or doctor. Do not give anything to an unconscious person	
Note to Physician: Treat symptomatically		
Most important symptoms/effects, acute and delayed: Mild to moderate eye irritation including redness,		
itching and tearing.		

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:	Use extinguishing measures that are appropriate to local circumstances
	and the surrounding environment.
Unsuitable Extinguishing Media:	None known
Hazardous Combustion Products:	Thermal decomposition may include toxic and irritating gases.
Special Protective Equipment &	Wear NIOSH/MSHA approved self-contained breathing apparatus and
Precautions:	full bunker gear. Dike area to prevent runoff and contamination of water
	sources. Dispose of fire control water later. Avoid breathing vapors;
	keep upwind.
Unusual Fire & Explosion Hazards:	None known

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:	See Section 8 for personal protection equipment.		
Environmental Precautions:	Do not allow spilled product to enter sewers or waterways.		
Methods for Containment:	Contain spilled product by diking area with sand or earth.		
Methods for Clean-up:	Cover contained spill with an inert absorbent material such as sand, vermiculite or other appropriate material. Vacuum, scoop or sweep up material and place in a container for disposal. Do not place spilled material back in original container.		
Other Information:	None known		



SECTION 7: HANDLING AND STORAGE

Handling:	Ensure adequate ventilation during handling and use. Immediately clean up spills that occur		
	during handling. Keep containers closed when not in use. Practice good hygiene after using this		
	material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.		
Storage:	Store in a secured area away from children, feed and food products. Store in original container		
_	only and in a cool, well-ventilated dry place above the minimum storage temperature.		
Storage Temperature (Min/Max): Not determined			
Product Incom	patibilities: Strong acids and metals		

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

COMPONENT		OSHA PEL	ACGIH TLV	NIOSH REL
Nuisance particulate (liquefied mist)			10 mg/m ³ TWA	
Engineering Controls:		local exhaust ventilation ow OSHA PELs or other		

ventilation is preferred.		
Respiratory Protection:	For most well-ventilated conditions, no respiratory protection should be needed. If airborne concentrations exceed permissible levels or if a pre-existing respiratory condition exists, use a NIOSH approved air-purifying respirator with cartridges/canisters approved for general particulates.	
Eye Protection:	Wear chemical goggles or safety glasses and full face shield. Contact lenses are not protective eye devices.	
Protective Gloves:	Wear chemically protective gloves.	
Other Protective Clothing:	Wear long-sleeve shirt, long pants and shoes plus socks to prevent skin contact.	
General Safety Measures:	Never eat, drink, nor use tobacco in work areas. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet,	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

or applying cosmetics.

Appearance:	Clear colorless to	Upper/Lower Flammability Limits:	Not determined
	light yellow liquid		
Odor:	Not determined	Vapor Pressure:	Not determined
Odor Threshold:	Not determined	Vapor Density:	Not determined
pH:	11.6 - 12.4	Relative Density:	1.41 - 1.43
Melting /Freezing Point:	Not determined	Solubility (water):	Soluble
Boiling Point/Range:	>100°C	Partition Coefficient:	Not determined
Flash Point:	Not applicable	Auto-ignition Temperature:	Not determined
Evaporation Rate:	Not determined	Decomposition Temperature:	Not determined
Flammability:	Not applicable	Viscosity:	Not determined



SECTION 10: STABILITY AND REACTIVITY

Reactivity:	None known
Chemical Stability:	Stable under normal storage and handling conditions.
Possibility of Hazardous Reactions:	Will not occur
Conditions to Avoid:	Extreme temperatures
Incompatible Materials:	Strong acids and metals
Hazardous Decomposition Products:	Thermal decomposition may include toxic and irritating gases.

SECTION 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:	Eye contact, Sk	in contact, Inhalatic	n, Ingestion	
Symptoms of Exposure:	Mild to modera	te eye irritation incl	uding redness,	itching and tearing. Irritation
	of the throat and	l coughing,		
Oral LD ₅₀ :	No data availab	le		
Dermal LD ₅₀ :	No data availab	le		
Inhalation LC50:	No data availab	le		
Eye Irritation/Damage:	No data availab	le		
Skin Corrosion/Irritation:	No data availab	le		
Skin Sensitization:	No data availab	le		
Chronic/Sub-chronic Toxicity:	No data availa	able		
Mutagenicity:	No data availa	able		
Reproductive Toxicity:	No data availa	able		
Neurotoxicity:	No data availa	able		
Target Organs:	No data availa	able		
Aspiration Hazard:	No data availa	able		
Carcinogenicity:				
Chemical Name	ACGIH	IARC	NTP	OSHA

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None known				

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY DATA:

Fish Toxicity:	No data available
Aquatic Invertebrate Toxicity:	No data available
Aquatic Plant Toxicity:	No data available
Avian Toxicity:	No data available
Honeybee Toxicity:	No data available

ENVIRONMENTAL

<u>EFFECTS:</u>	
Persistence and Degradability:	No data available
Bioaccumulation:	No data available
Mobility:	No data available
Other Adverse Effects:	No data available



SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal:	Wastes resulting from the use of this product must be disposed of on site or at an
	approved waste disposal facility.
Container Disposal:	Triple rinse and recycle the container or dispose of in accordance with Federal, state and local laws and regulations. See pesticide label for full instructions on container
	disposal.
RCRA Characteristics:	It is the responsibility of the individual disposing of this product to determine the
	RCRA classification and hazard status of the waste.

SECTION 14: TRANSPORTATION INFORMATION

DOT	This product is not regulated by the U.S. Department of Transportation as a hazardous material
(Ground):	for ground shipment.
IMDG (Sea):	This product is not regulated by the IMDG as a hazardous material for shipment by sea.
IATA (Air):	This product is not regulated by the IATA as a hazardous material for shipment by air.

SECTION 15: REGULATORY INFORMATION

TSCA Inventory:	All components are listed.		
SARA Title III Inform	ation:		
Section 302 – Extrem	nely hazardous substances:	None listed	
Section 311/312 – Hazard Categories:		Immediate (Acute)	
Section 313 – This product contains a chemical or chemicals which are subject to the reporting			
requirements of the A	ct and Title 40 of the Code of	Federal Regulations, Part 372:	
		01011 I	

Chemical Name	CAS Number	Weight %
None listed		

CERCLA – This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Chemical Name	CAS Number	RQ	Quantity of Finished
			Product
None listed			

CALIFORNIA PROPOSITION 65:

Chemical Name	CAS Number	Prop 65 Category(ies)
None listed		

U.S. STATE RIGHT-TO-KNOW REGULATIONS:

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Not determined			

SECTION 16: OTHER INFORMATION				
NFPA	Health Hazards 1	Flammability 0	Instability 0	Special Hazards – None

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GrowforceTM KS32

liability to any person, property, or thing in respect of any consequence of anything done or omitted to be done by any person in reliance, whether wholly or in part, upon whole or part of the contents of this SDS.

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