Safety Data Sheet



SDS (formerly MSDS)

Conforms to HCS 2012 - United States

Date: 04/02/2016











Potassium Drive

NFPA	HMIS	WHMIS	TDG	DOT
000	Healthminor1Flammabilityminimal0Physical Hazardminimal0Personal ProtectionB	\bigcirc		

Section 1. Identification

Product Name:	Potassium Drive
Synonyms:	Liquid potassium solution.
Recommended Use / Restrictions:	For turf, ornamentals, trees, crops & hydroponics.
Company:	DUTCH DIRECT 18 North 57th Drive Ste #1 Phoenix Az 85043 United States info@dutchdirect.us
Company Phone Number:	+1 (844) 388-2434
Emergency Phone Number:	800-222-1222 (American Association of Poison Control Centers)

Section 2. Hazard(s) identification

Emergency Overview:	This product is not considered hazardous and does not require labeling.
Potential Health effects:	This product may irritate eyes and skin upon prolonged or repeated contact. Overexposure by inhalation may cause respitory tract irritation. Do not ingest. Ingestion of large amounts of this substance may produce irritation of the gastro-intestinal tract. May cause local discomfort if skin with cuts is exposed.
Signal Word:	WARNING.
Hazard Statements:	N/A
Pictogram:	



Section 3. Composition / information on ingredients

Composition information:				
Subtance/Mixture:	Mixture.			
CHEMICAL NAME	CAS REGISTRY No	REACH No	EINECS No	
Potassium carbonate: Water	584-08-7 7732-18-5	-	209-529-3 215-185-5	

Section 4. First-aid measures

Routes of Exposure:		
INHALATION:	Not expected to be harmful under normal conditions of use, however if allowed to become airborne, may cause irritation of nose, throat and lungs. If symptoms are experienced remove source of contamination or move victim to fresh air. Obtain medical attention if needed.	
INGESTION:	Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING.	
EYE CONTACT:	Irritating to eyes. Immediately flush the contaminated eye(s) with cold, gently flowing water for 5 minutes. Remove contact lenses, if applicable and continue flushing for 15 minutes. Rise entire surface of the eye(s) and lids. If irritation persists, seek medical attention.	
SKIN CONTACT:	No significant effects or critical hazards. If irritation occurs, flush affected skin area with cold water. If irritation persists, seek medical attention.	

Section 5. Fire-fighting measures

Fire and Explosion Hazards:	Non-combustible.
Flammable Limits:	LEL: N/A, UEL: N/A
Extinguishing Media:	Use an extinguishing agent suitable for the surrounding fire.
Fire Fighting Procedures:	None.
Flashpoint and Method:	Not flamable.
Decomposition Products:	Oxides of Carbon, potassium oxides.





Section 6. Accidental release measures

Steps to be taken in case material is released or spilled:

Stop leak if without risk. Prevent product from entering drinking water supplies. Collect liquid or solidify with absorbent material and package for disposal according to local, state, and federal regulations.

Waste disposal precedures:

Dispose in accordance with state and local regulation.

Reportable Quantity under Cercla: N/A

Section 7. Handling and storage

Storage temperature:									
MAX:	100° F	MIN:	32° F	INDOOR:	\checkmark	OUTDOOR:	x	REFRIG:	X
Precautions to be taken in handling:									
For safe handling - put on appropriate protective clothing (PPE). Do not ingest. Avoid contact with eyes, skin and clothing. Do not reuse containers. Refrain from eating, drinking and smoking in work areas.									
Precautions to be taken in storage:									
Not harmed	Not harmed by freezing. Thaw frozen fertilizer slowly and stir before using. Store in a cool, dry well ventilated area.								

Rotate stock in storage to use oldest first. Store in original containers only. Keep out of reach of children.

Section 8. Exposure controls / Personal protection

SKIN PROTECTION (Gloves):	Gloves.
EYE PROTECTION:	Use goggles.
PROTECTIVE CLOTHING:	Where there is a large scale use of this material with significant potential for worker contact, long-sleeved clothing or coveralls, chemical resistant gloves, and/or safety glasses with side shields may be necessary.
OTHER PROTECTION:	N/A

Respiratory Protection or Required Ventilation:

Not normally needed. Where air contaminants can exceed acceptable criteria use NIOSH/MSHA approved respiratory protection equipment.



Physical State:	Liquid.	Evaporation Rate:	9.7-15.3 mm Hg @20.5C
Color:	Colorless.	Boiling Point:	About 221° F / 105° C
Odor:	Odorless.	Freezing Point:	<32°F / 0° C
Weight Per Gallon / Liter:	11.2# @ 70° F / 1.34 Kg @ 21° C	Viscosity:	5-15 cps @ 21 Degrees C
Storage Life at 70F:	>2 years	Flash Point/Method:	Not flammable.
pH – 21C:	12.6	Vapor Pressure:	N/A
Solubility:	100%	Storage Temperature:	Above 32° F / 0° C

Section 9. Physical and chemical properties

Section 10. Stability and reactivity

Chemical stability:	Stable at normal temperatures and pressures.
Conditions to avoid:	Avoid contact with strong acids.
Incompatible materials:	N/A (None known)
Hazardous decomposition products:	Oxides of carbon, potassium oxides. Contact with acids can release dangerous quantities of carbon dioxide.
Hazardous polmerization:	Will not occur.

Section 11. Toxicological information

Effect of overexposure acute (short term exposure):	Liquid contact may cause slight eye irritation and repeated skin exposure may cause some skin irritation.
Choronic (long term exposure):	None Known
Exposure routes:	Not expected to be harmful under normal conditions of use, however if allowed to become airborne, may cause irritation of nose, throat and lungs. May cause irritation on prolonged or repeated contact





Hazard:		
ACUTE TOXICITY (LETHAL DOSES):		
DERMAL LD 50 :	N/E	
ORAL LD 50 :	N/E	
ACUTE TOXICITY (IRRITATION, SENSITIZATION):		
EFFECTS TO EYES:	No corneal or iridal effects were noted at a dose of 0.1 ml for rabbits.	
EFFECTS TO INGESTION:	Non-toxic or pathogenic.	
EFFECTS TO SKIN:	Moderate irritation, reversible within 7 days.	
CARCINOGENICITY DATE:	Not classified as a carcinogen per GHS criteria. This product in not classified as a carcinogen ny NTP, IARC or OSHA.	

Section 12. Ecological information

Toxicity:	This material is not classified as hazardous. Use according to good working practices.
Ecotoxicity:	Aquatic = 68mg/L 96 hrs., Invertebrate =200- 430 mg/ L 48 hrs.
Mobility In Soil:	This product is believed not to persist in the environment.
Other Adverse Effects:	May increase pH of water ways and adversely affect aquatic life.

Section 13. Disposal considerations

WASTE DISPOSAL:

Waste should be avoided or minimized wherever possible. Empty containers may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.



Section 14. Transport information

Dot un status:	This material is not regulated hazardous material for transportation.

Section 15. Regulatory information

N/E

Section 16. Other information

Other precautions:	Read enitre label before using.
Revised Date:	4 February 2016

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Abbreviations / acronyms:	N/E:	Not Established.	N/A:	Not Applicable.	
	NFPA:	Not Applicable.			
	HMIS:	Hazardous Materials Identification System.			
	WHMIS:	Workplace Hazardous Materials Information System.			
	TDG:	Transport of Dangerous Goods.			
	DOT:	Department of Transportation.			
	NIOSH:	National Institute of Occupational Safety & Health.			
	RELs:	Recommended Exposure Limits.			
	NTP:	National Toxicology Program.			
	IARC:	International Agency for Research on Cancer.			
	OSHA:	Occupational Safety and Health Administration.			
	GHS:	Globally Harmonized System.			





HMIS Letter: B Required Equipment:	Safety Glasses Gloves
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