SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

FORMULATED FOR:

Hydrasmart P.O Box 12706 ROANOKE, VA 24027

PRODUCT NAME: Hydra-pHix CHEMICAL NAME: 2-Hydroxy - 1,2,3 - Propanetricarboxylic Acid

Date of Issue: 4/18/18

2. HAZARDS INDETIFICATION SUMMARY

Hazard Classification:

Acute toxicity, dermal: Category 5 Skin irritation: Category 3 Eye irritation: Category 2A

Signal Word: "WARNING" Hazard Statements:

H313-May be harmful in contact with skin H315-Causes skin irritation H320-Causes eye irritation H303-May be harmful if swallowed Precautionary Statements: (PREVENTION) P260-Do not breathe mist/vapors/spray P264-Wash thoroughly after handling P270-Do not eat, drink or smoke when using this product P271-Use only outdoors in a well-ventilated area P273-Avoid release to the environment P280-Wear protective gloves / eye protection / face protection (RESPONSE) P301+P312- If swallowed, call a POISON CENTER or doctor if you feel unwell P330-Rinse mouth P302+P352-IF ON SKIN wash with plenty of soap and water P305+P351+P338-IN IN EYES rinse cautiously with water for 20 minutes, remove contact lenses and continue rinsing P337+P313-If eye irritation persists, get medical advice / attention P362+P364-Take off contaminated clothing Precautionary Statements, Storage: P403+P233-Store in a well-ventilated place. Keep container tightly closed. P501-Dispose of container in accordance with local regulations



3. COMPOSTITION, INFORMATION ON INGREDIENTS

Chemical Ingredients:	Percentage of Weight:	CAS No.
Citric Acid	Proprietary	77-92-9
Methyl Red	Proprietary	845-10-3

4. FIRST AID MEASURES

Flush with clean running water for at least 15 minutes. If irritation persists, get medical attention
Remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists, or if a
rash develops, get medical attention.
If conscious, drink 1 or 2 glasses of water and get medical attention. Do not induce vomiting or
give anything by mouth to an unconscious person.
Remove to fresh air. If irritation persists, get medical attention.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method):	Does not flash
FLAMMABLE LIMITS (LFL & UFL):	Not established
EXTINGUISHING MEDIA: HAZARDOUS COMBUSTION PRODUCTS:	Considered non-combustible. Use foam, CO2, dry chemical, or water Vapors are non-toxic and non-irritant Heating to dryness may cause the release of carbon dioxide gas. Cool containers with water spray.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Ventilate area. Stop leak, contain spill and absorb with soil or natural absorbents. Liquid is corrosive. Ensure pumping equipment is 316 stainless steel. Sweep up waste and place in container for disposal. Keep spills and rinsate out of municipal sewers and open bodies of water. Uncontaminated spilled material may be reused.

7. HANDLING AND STORAGE

HANDLING:	Avoid inhalation of mists, vapors/spray, and contact with eyes, skin and clothing. Wear personal protective equipment. Do not use in areas without adequate ventilation. Avoid prolonged exposure. Wash thoroughly after handling. Do not empty into drains. Handle and open container with care. Wash before eating, drinking, or smoking.
STORAGE:	Store in the original labeled container in a cool place away from direct sunlight. Keep separate from food and feed products and out of reach of children and animals. Avoid storage at temperatures of 110F or higher. Corrosive to steel, aluminum, brass. Use with stainless steel or PVC fittings.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits:

US Workplace Exposure Level TLV's: No data available US Workplace Exposure Level PEL's: No data available Biological Limit Values: No listings

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: SOLUBILITY:	Red liquid Soluble		
pH:	<1	BULK DENSITY:	10.9
SPECIFIC GRAVITY (Water = 1):	1.31	BOILING POINT:	212°F
VAPOR PRESSURE:	Not established	EVAPORATION DATE:	Not established
PERCENT VOLATILE (by volume): 0% w/w			

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

STABILITY: Stable for at least 2 years under normal conditions.

INCOMPATIBILITY: Metal nitrates (potentially explosive reaction), alkali carbonates and bicaronates, potassium tartrate. Will corrode copper, zinc, aluminum and their alloys.

HAZARDOUS DECOMPOSTITION PRODUCTS: Heating to dryness may cause the release of carbon dioxide and carbon monoxide gas

HAZARDOUS POLYMERIZTION: Will not occur.

11. TOXICOLOGICAL INFORMATION

 Acute Oral LD50(rat): Not established

 Acute Dermal LD50(rat): Not established

 Eye Irritation (rabbit): Not established

 Inhalation LC50(rat): not established

 Skin Irritation (gu

 Carcinogenic Potential: None listed in OSHA, NTP, IARC, or ACGIH

Skin Irritation (rabbit): not established Skin Sensitization (guinea pig): not established NTP. IARC. or ACGIH

12. ECOLOGICAL INFORMATION

Ecotoxicology: Toxicity to fish mortality LC50 - Leuciscus idus melanotus - 440 mg/l - 48 h / Method: OECD Test Guideline 203. Toxicity to daphnia and other aquatic invertebrates static test - Daphnia magna (water flea) - 1,535 mg/l - 24 h.

13. DISPOSAL CONSIDERATIONS

Do not reuse containers. Rinse container thoroughly, adding rinsate to tank mix. Offer for recycling at an ACRC site or dispose of in a sanitary landfill. Avoid contaminating water by disposal of equipment wash waters or other product wastes.

14. TRANSPORT INFORMATION

DOT Shipping Description: UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Citric Acid), 8, II

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:	NFPA 2 Health 0 Flammability 0 Instability	0 Least 1 Slight 2 Moderate 3 High 4 Severe	HMIS 2 Health 0 Flammability 0 Reactivity H PPE		
SARA Hazard Notification/Reporting SARA Title III Hazard Category:	Immediate <u>Y</u> Delayed <u>N</u>	· · · · · · · · · · · · · · · · · · ·	Sudden Release of Pressure <u>N</u>		
Reportable Quantity (RQ) under U.S. CERCLA: Not listed SARA, Title III, Section 313: Not listed RCRA Waste Code: Not listed					

16. OTHER

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