

## SECTION 1 - Chemical Product & Company Identification

Product Name Crystal Screen™ Kit

Product Number HR2-110

Company Hampton Research

Street Address 34 Journey

City, State, Zip, Country Aliso Viejo, CA 92656

Technical Phone 949 425 1321

Fax 949 425 1611

Emergency Phone 949 425 1321

For **CHEMTREC** Assistance, call: 800 424 9300

For International **CHEMTREC** Assistance, call: 703 527 3887

## SECTION 2 - Composition / Information on Ingredient

Substance Name	CAS #	SARA	RTECS	UN #	HAZARD Code	LD50
(+/-)-2-Methyl-2,4-pentanediol	107-41-5	no	SA0810000		Xi	3700 mg/kg
2-Propanol	67-63-0	yes	NT8050000	1219	F, Xi	5045 mg/kg
Ammonium acetate	631-61-8	no	AF3675000	3077		736 mg/kg
Ammonium phosphate monobasic	7722-76-1	no				5750 mg/kg
Ammonium sulfate	7783-20-2	no	BS4500000			2840 mg/kg
Calcium acetate hydrate	62-54-4	no	AF7525000		Xi	203 mg/kg
Calcium chloride dihydrate	10035-04-8	no	EV9810000		Xi	
HEPES sodium	75277-39-3	no				
Imidazole	288-32-4	no	NI3325000	2923	C	220 mg/kg
Lithium sulfate monohydrate	10102-25-7	no			Xn	
Magnesium acetate tetrahydrate	16674-78-5	no	AI5600000			111 mg/kg
Magnesium chloride hexahydrate	7791-18-6	no	OM2975000			8100 mg/kg
Magnesium formate dihydrate	6150-82-9	no				
Polyethylene glycol 400	25322-68-3	no	TQ3675000			30200 mg/kg
Polyethylene glycol 1,500	25322-68-3	no	TQ4030000			44200 mg/kg
Polyethylene glycol 4,000	25322-68-3	no	TQ4050000			76000 mg/kg
Polyethylene glycol 8,000	25322-68-3	no	TQ4105000			> 50000 mg/kg
Potassium phosphate monobasic	7778-77-0	no	TC6615500			
Potassium sodium tartrate tetrahydrate	6381-59-5	no				
Sodium acetate trihydrate	6131-90-4	no	AJ4580000			
Sodium cacodylate trihydrate	6131-99-3	yes	CH7890000	1688	T, N	2000 mg/kg
Sodium citrate tribasic dihydrate	6132-04-3	no				
Sodium formate	141-53-7	no	LR0350000			11200 mg/kg

## (CONTINUED) - SECTION 2 - Composition / Information on Ingredient

Substance Name	CAS #	SARA	RTECS	UN#	HAZARD Code	LD50
Sodium phosphate monobasic monohydrate	10049-21-5	no				
Tris hydrochloride	1185-53-1	no			Xi	
Zinc acetate dihydrate	5970-45-6	yes	ZG8750000	3077	Xn, N	794 mg/kg

For additional information, please refer to the individual Material Safety Data Sheets(s).

## SECTION 3 - Hazards Identification

### HMIS RATING

HEALTH HAZARD: 1

FLAMMABILITY: 1

REACTIVITY: 0

### NFPA RATING

HEALTH HAZARD: 1

FLAMMABILITY: 1

REACTIVITY: 0

### HAZARD RATINGS

0 - LEAST

1 - SLIGHT

2 - MODERATE

3 - HIGH

4 - EXTREME

For additional information on toxicity, please refer to **SECTION 11**.

## SECTION 4 - First Aid Measures

### ORAL EXPOSURE

- If swallowed, wash out mouth with water provided person is conscious.
- DO NOT INDUCE VOMITING.
- Call a physician.

### INHALATION EXPOSURE

- If inhaled, remove to fresh air.
- If breathing is difficult, GIVE OXYGEN.
- Call a physician.

### DERMAL EXPOSURE

- In case of contact, immediately wash skin with soap and copious amounts of water for at least 15 minutes.
- Remove contaminated clothing and shoes.
- Call a physician.

### EYE EXPOSURE

- In case of contact with eyes, flush with copious amounts of water for at least 15 minutes.
- Assure adequate flushing by separating the eyelids with fingers.
- Call a physician.

## SECTION 5 - Fire Fighting Measures

### FLASH POINT

N/A

### FLAMMABILITY

N/A

### AUTOIGNITION TEMPERATURE

N/A

### EXTINGUISHING MEDIA

- Suitable: Water spray, Carbon dioxide, dry chemical powder, or appropriate foam.

### FIREFIGHTING

- Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

## SECTION 6 - Accidental Release Measures

### PROCEDURE(S) OF PERSONAL PRECAUTIONS

- Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

### METHODS FOR CLEANING UP

- Wash spill site with soap solution. Flush spill area with copious amounts of water.
- Place in appropriate container.

## SECTION 7 - Handling & Storage

### HANDLING

- User Exposure
  - Avoid inhalation.
  - Avoid contact with eyes, skin, and clothing.
  - Avoid prolonged or repeated exposure.

### STORAGE

- Suitable: Keep tightly closed.

## SECTION 8 - Exposure Controls / PPE

### ENGINEERING CONTROLS

- Mechanical exhaust required.
- Safety shower and eye bath

### PERSONAL PROTECTIVE EQUIPMENT

- Respiratory: Use respirators and components tested and approved under appropriate government standards such as (NIOSH) or CEN (EU). Respiratory protection is not required. Where protection from nuisance levels of dust are desired, use type N95 (US) or type (P1) (EN 143) dust masks.
- Hand: Compatible chemical-resistant gloves.
- Eye: Chemical safety goggles.

### GENERAL HYGIENE MEASURES

- Wash thoroughly before and after handling.

## SECTION 9 - Physical / Chemical Properties

### APPEARANCE

PHYSICAL STATE: Liquid

### PROPERTY

### VALUE

### AT TEMPERATURE OR PRESSURE

Molecular Weight	N/A
pH	N/A
BP / BP Range	N/A
MP / MP Range	N/A
Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Saturated Vapor Concentration	N/A
SG / Density	N/A
Bulk Density	N/A
Odor Threshold	N/A
Volatile %	N/A
VOC Content	N/A
Water Content	N/A
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Surface Tension	N/A
Partition Coefficient	N/A
Decomposition Temperature	N/A
Flash Point	N/A
Explosion Limits	N/A
Flammability	N/A
Autoignition Temperature	N/A

## (CONTINUED) - SECTION 9 - Physical / Chemical Properties

PROPERTY	VALUE	AT TEMPERATURE OR PRESSURE
Refractive Index	N/A	
Optical Rotation	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

**N/A = NOT AVAILABLE**

## SECTION 10 - Stability & Reactivity

### STABILITY

- Stable: Stable.
- Materials to Avoid: Strong oxidizing reagents.

### HAZARDOUS DECOMPOSITION PRODUCTS

- Carbon monoxide
- Carbon dioxide

### HAZARDOUS EXOTHERMIC REACTIONS

- Will not occur.

### HAZARDOUS POLYMERIZATION

- Will not occur.

## SECTION 11 - Toxicological Information

### ACUTE TOXICITY

- No data available.

### IRRITATION AND CORROSION

- No data available.

### SENSITISATION

- No data available.

### CHRONIC EXPOSURE

- No data available.

### ROUTE OF EXPOSURE

- Skin Contact: May cause skin irritation
- Skin Absorption: May be harmful if absorbed through the skin.
- Eye Contact: May cause eye irritation.



## (CONTINUED) - SECTION 15 - Regulatory Information

### EU ADDITIONAL INFORMATION

Substance Name	CAS #	HAZARD Code	R-Phrase	S-Phrase
(+/-)-2-Methyl-2,4-pentanediol	107-41-5	Xi	36/38	26-36
2-Propanol	67-63-0	F, Xi	11-36-67	7-16-24/25-26
Calcium acetate hydrate	62-54-4	Xi	36/37/38	26-36
Calcium chloride dihydrate	10035-04-8	Xi	36	26
HEPES sodium	75277-39-3			22-24/25
Imidazole	288-32-4	C	22-34	26-36/37/39-45
Lithium sulfate monohydrate	10102-25-7	Xn	22	
Magnesium acetate tetrahydrate	16674-78-5			22-24/25
Magnesium formate dihydrate	6150-82-9			22-24/25
Sodium cacodylate trihydrate	6131-99-3	T, N	23/25-50/53	20/21-28-45-60-61
Tris hydrochloride	1185-53-1	Xi	36/37/38	26/36
Zinc acetate dihydrate	5970-45-6	Xn, N	22-36-50/53	20-60-61

### UNITED STATES REGULATORY INFORMATION

#### SARA 313 COMPONENTS:

- |                              |           |                 |
|------------------------------|-----------|-----------------|
| • Component                  | • CAS#    | • Revision Date |
| 2-Propanol                   | 67-63-0   | 1987-01-01      |
| Sodium cacodylate trihydrate | 6131-99-3 |                 |
| Zinc acetate dihydrate       | 5970-45-6 |                 |
- SARA LISTED: For additional information on toxicity, please refer to **SECTION 2**.

### CANADA REGULATORY INFORMATION

- WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
- DSL: Yes
- NDSL: No

## SECTION 16 - Other Information

### DISCLAIMER

- For R&D use only. Not for drug, household, or other use.

### WARRANTY

- The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of this product. Hampton Research Corp., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.
- License granted to make unlimited paper copies for internal use only.

© 2008 Hampton Research Corp.