



**HAZARD RATING**

4=EXTREME  
3=HIGH  
2=MODERATE  
1=SLIGHT  
0=INSIGNIFICANT

<b>HEALTH</b>	<b>2</b>
<b>FLAMMABILITY</b>	<b>0</b>
<b>REACTIVITY</b>	<b>1</b>

**MATERIAL SAFETY DATA SHEET**  
**VEXCON NO. OP134**

**GENERAL INFORMATION**

**PRODUCT IDENTIFICATION:** STARSEAL® PRE-DENSIFIER FLOOR CLEANER

**VOC CONTENT:** 0 GR/LITER OR 0 #/GAL.

**CATEGORY:** NOT REQUIRED

**COMMON NAME:** DIAMMONIUM CITRATE SOLUTION

**DOT SHIPPING NAME:** IN CONTAINERS LESS THAN 119 GALS AND GREATER THAN 119 GALS: DIAMMONIUM CITRATE – NON REGULATED

**HEALTH AND SAFETY:** Slightly acidic that may cause damage to the skin and eyes. May cause respiratory tract irritation. Wear proper safety equipment to avoid exposure.

**SECTION I**

**MANUFACTURER:** VEXCON CHEMICALS  
**EMERGENCY NO:** 1-800-858-2828  
**CHEMTREC NO:** 1-800-424-9300  
**TELEPHONE NO:** 1-215-332-7709  
**ADDRESS:** 7240 STATE RD., PHILA. PA 19135  
**PREPARED:** OCTOBER 2008  
**PREPARED BY:** DARRYL F. MANUEL

**SECTION II HAZARDOUS INGREDIENTS**

**CHEMICAL NAME:** DIAMMONIUM CITRATE SOLUTION

MATERIAL OR COMPONENTS	CAS. NO.	%	HAZARD DATA
DIAMMONIUM CITRATE SOLUTION	3012-65-5	18	N/D

**SECTION III PHYSICAL/CHEMICAL CHARACTERISTICS**

**BOILING POINT:** 215° F

**VAPOR PRESSURE:** MM/HG: 0.0285 (36° F) - 17.5 (68° F)

**SPECIFIC GRAVITY (H2O=1):** 1.082

**SOLUBILITY IN H2O % BY WT:** 100%

**EVAPORATION RATE (BUOH=1):** N/A

**APPEARANCE AND ODOR:** Clear liquid with light odor

PH: 6

**SECTION IV FIRE AND EXPLOSION DATA**

**FLASH POINT:** N/A

**AUTOIGNITION TEMPERATURE:** N/A

**FLAMMABLE LIMITS IN AIR: % BY VOL:** N/A

**LOWER:** NA **UPPER:** NA

**EXTINGUISHING MEDIA:** NON FLAMMABLE. EXTINGUISH SOURCE OF FIRE. CO2, DRY CHEMICAL, WATER FOG – AT HIGH TEMPERATURE DECOMPOSES FORMING TOXIC FUMES.

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear NIOSH/MSHA approved self-Contained breathing apparatus with a full face piece operated in pressure demand or other positive pressure mode, and full body protective clothing when fighting fires. Water spray may be used to cool closed containers.

**SECTION V REACTIVITY DATA**

**STABILITY:** IS STABLE..

**INCOMPATIBILITY:** (Materials to Avoid).Metals, oxidizing agents, reducing agents, alkalis.

**HAZARDOUS DECOMPOSITION OR DECOMPOSITION PRODUCTS:**

AMMONIA AND NITROGEN.

**CONDITIONS TO AVOID:** Contact with strong bases (alkalis), can cause violent reaction generating large amounts of heat.

**SECTION VI HEALTH HAZARD INFORMATION**

**ROUTES OF EXPOSURE:**

**EMERGENCY OVERVIEW:** ODORLESS, CLEAR LIQUID THAT IS MILDLY ACIDIC CAN CAUSE BURNS AND HARMFUL IF SWALLOWED OR INHALED.

**INHALATION HEALTH RISKS AND SYSTEMS OF EXPOSURE:** WILL CAUSE SEVERE IRRITATION TO THE UPPER RESPIRATORY TRACT.

**SKIN AND EYE CONTACT:** CAN CAUSE SEVERE IRRITATION.

**SKIN ABSORPTION:** SEE ABOVE

**INGESTION/INHALATION:** CAN CAUSE SEVERE BURNS TO THE MOUTH, THROAT AND STOMACH.

**EFFECTS OF OVEREXPOSURE:** Causes burns to eyes that may cause permanent damage. Causes burns to skin. Breathing of mist can cause irritation to nasal and respiratory passages. Ingestion can cause damage to mucous membranes.

**ACUTE OVEREXPOSURE:** FATALITIES CAN OCCUR FROM INGESTION.

**EMERGENCY AND FIRST AID PROCEDURES:**

**EYES:** FLUSH IMMEDIATELY WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. IF IRRITATION PERSISTS, TAKE TO A PHYSICIAN FOR TREATMENT. IF SWALLOWED: OBTAIN MEDICAL ATTENTION IMMEDIATELY.

**SKIN:** THOROUGHLY WASH EXPOSED AREA WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING.

**INHALATION:** REMOVE TO FRESH AIR, GIVE CPR IF UNCONSCIOUS.

**SECTION VII PRECAUTIONS FOR SAFE HANDLING AND USE**

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**

Evacuate immediate area where concentrated fumes are present. Clean up Personnel must wear proper protective equipment. Completely contain spilled Material with dikes, etc., and prevent runoff into ground and surface waters or into sewers. Dilute with water and neutralized with soda ash or dilute caustic soda. Neutralized material, both liquid and solid, should be recovered for proper disposal. Provide adequate ventilation.

**WASTE DISPOSAL METHOD: TREATMENT.** Recovered solids or liquids may be sent to a licensed reclaimer or disposed of in a permitted waste management facility. Neutralized liquid residues should be acceptable for discharge to a sanitary sewer with permission of the receiving facility. Consult federal, state, and/or local authorities for approved procedure. Empty containers may be triple rinsed with water to remove all residues and disposed of in a sanitary landfill.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:** STORE AT AMBIENT TEMPERATURE IN CLOSED CONTAINER TO PREVENT EVAPORATION. MAY BE STORED IN TEMPERATURES FROM 40F TO 140F WITHOUT DETERIORATION.

**OTHER PRECAUTIONS:** "DO NOT TAKE INTERNALLY." "AVOID PROLONGED SKIN CONTACT." PRODUCT IS A STRONG CLEANER AND DEGREASER IN AN ACIDIC SOLUTION. THE PRODUCT SHOULD BE HANDLED WITH CARE AND USED ONLY FOR ITS INTENDED PURPOSE. **FOR INDUSTRIAL USE ONLY.**

**SECTION VIII CONTROL MEASURES**

**VENTILATION REQUIREMENTS:** Provide sufficient general and/or local exhaust ventilation to maintain exposure below the TLV

**RESPIRATORY PROTECTION:** Diammonium Citrate Solution has a very low vapor pressure at room temperature and is not expected to present a significant inhalation hazard under ambient conditions. For vapor or mist concentrations; which exceed or are likely to exceed threshold limit value (TLV) for Diammonium Citrate Solution, a NIOSH/MSHA approved supplied air respirator in the continuous feed mode should be utilized. A NIOSH approved dust/mist respirator may be used for nuisance level mists. Follow all applicable

respirator use standards and regulations.

**EYES:** Chemical splash goggles and/or full-face shield (8-inch Minimum) in compliance with OSHA regulations. Do not wear Contact lenses because they may contribute to the severity of an eye injury.

**GLOVES:** Rubber type, neoprene or PVC with acceptable acid resistance

**OTHER CLOTHING AND EQUIPMENT:** Acid-resistant rubber boots, headgear as needed depending on application methods and job-site conditions. Eyewash and safety shower should be readily accessible.

**SECTION IX SPECIAL PRECAUTIONS**

**WORK PRACTICES:** Proper work practices and planning should be utilized to Avoid contact with workers, passerby, and non-masonry surfaces. Do not automate during application. Beware of wind drift. Pre-rinsing with low-pressure water immediately before pressure washing effectively reduces product content in pressure washing residues. See the Product Data Sheet and label for specific precautions to be taken during use. Smoking, eating and drinking should be prohibited during the use of this product. Wash hands before breaks and at the end of a shift.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Use proper safety equipment (see VIII) when handling. Store in a cool, well-ventilated area. Separate from oxidizing agents, reducing agents, alkalis, cyanides, sulfides, etc. (see section VI). Dilution, storage and application equipment should be HDPE, polypropylene or other acid-resistant materials. Addition of acidic cleaner to water releases heat which can result in violent boiling and spattering. **Always add cleaner to water slowly and in small amounts. Never use hot water. Never add water to acidic cleaners.** Containers of this material may be hazardous when emptied, since emptied containers retain product residues (vapor, liquid, and/or solid). All hazard precautions given in this data sheet must be observed.

**HMS HAZARD RATINGS:**

	NPCA-HMI	NFPA 704	KEY
HEALTH	2	2	4=SEVERE
FLAMMABILITY	0	0	3=SERIOUS
REACTIVITY	1	1	2=MODERATE
			1=SLIGHT
			0=MINIMAL

ADDITIONAL REGULATORY CONCERNS: (FEDERAL, FDA, USDA, CPSC, STATE, OTHER)FEDERAL:FDA:USDA:TSCA: IS THIS PRODUCT, OR ALL IT'S INGREDIENTS, BEING CERTIFIED FOR INCLUSION ON THE TOXIC SUBSTANCES CONTROL ACT INVENTORY OF CHEMICAL SUBSTANCES? YES

**THE INFORMATION PROVIDED IN THIS MATERIAL SAFETY DATA SHEET HAS BEEN OBTAINED FROM SOURCES BELIEVED TO BE RELIABLE. VEXCON PROVIDES NO WARRANTIES, EXPRESS OR IMPLIED, AND ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETMENT OF THE INFORMATION CONTAINED HEREIN.**