

1 - Product and Company Identification

Product name: Cublen K 2222-US
Product type/usage/industry: Aqueous solution of a salt of an organophosphonic acid
Manufacturer/Supplier Information: Zschimmer and Schwarz, Inc.
70 GA Hwy. 22 W
Milledgeville, GA 31061
Phone: (478) 454-1942
Emergency contact: **Company:** (478) 454-1942
CHEMTREC (24HR): (800) 424-9300

2 – Hazards Identification

Classification of the substance or mixture: Classification of this substance/mixture is based on
29 CFR 1910.1200/HazCom 2012 (GHS-US)

Not classified

Labelling:

Signal Word:

None

Hazard Symbols:

None

Precautionary Statements:

P262: Do not get in eyes, on skin, or on clothing
P302+352: IF ON SKIN: Wash with plenty of soap and water.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P314: Get medical advice/attention if you feel unwell.

Key to Hazard Categories:

1=Severe Hazard 2=Serious Hazard 3=Moderate Hazard 4=Slight Hazard 5=Minimal Hazard

3 – Composition/Information on Ingredients

<u>CAS Number</u>	<u>Material or component</u>	<u>Avg % weight</u>
21089-06-5	Phosphonic acid, (1-hydroxyethylidene)bis-, dipotassium salt	20 – 30%

This is not intended to be a complete compositional disclosure. Information provided pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200/ HazCom 2012). See Section 8 for Exposure Limits, if any.

4 - First Aid Measures

Eyes:	Immediately flush with gentle but large stream of water for 15 min, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.
Skin:	Wash affected area with soap and water. If itching or redness develops, seek medical attention. Contaminated clothing should be removed immediately and washed before reuse. Contaminated shoes should be discarded.
Inhalation:	Move the person to fresh air. If breathing becomes difficult, contact a physician.
Ingestion:	Do not induce vomiting. If large amounts were swallowed, give water to rinse mouth and get immediate medical attention if you feel unwell.

5 - Firefighting Measures

Extinguishing Media:	Water spray, dry chemical, alcohol foam, or carbon dioxide.
Unsuitable Extinguishing Media:	None known.
Special Protective Equipment for Firefighters:	Self-contained breathing apparatus and protective clothing when fighting any chemical fire.
Unusual Fire & Explosion Hazards:	In case of fire, containers may explode from internal pressure. Cool with water. May emit toxic fumes of CO and CO ₂ under fire conditions.

6 - Accidental Release Measures

Personal precautions:	Avoid contact with skin and eyes. Avoid breathing vapors or mists. Keep people away from and upwind of spill/leak. Ensure adequate ventilation, especially in confined areas. Keep away from heat and sources of ignition.
Environmental precautions:	P273: Avoid release to the environment Limit leakage with earth or sand. Do not discharge into the drains/surface water/groundwater. Dispose of absorbed material in accordance with local, state and federal regulations.
Methods for Containment/Cleaning Up:	Take up with absorbent material (e.g. vermiculite, general purpose binder). Dispose of absorbed material in accordance with local, state, and federal regulations.

7 - Handling and Storage

Handling:	P261: Avoid breathing mists of product P262: Do not get in eyes, on skin, or on clothing P264: Wash thoroughly after handling P280: Wear protective gloves/protective clothing/eye protection/face protection
Storage:	P402+404: Store in a dry place. Store in a closed container P403+233: Store in a well-ventilated place. Keep container tightly closed Do not store together with acids.
Special Packaging Requirements:	P406: Store in a corrosive resistant container with a resistant inner liner. Do not use iron, steel, copper / copper-alloys or light alloy receptacles. For short time storage stainless steel containers are acceptable.
Incompatible Materials or Fire/Explosion Protection:	Strong oxidizers, acids.

8 - Exposure Controls/Personal Protection

Personal Protective Equipment (PPE):

Hand Protection: Use impervious gloves.
Eye Protection: Wear safety glasses with side shields or full face shield.
Skin Protection: Wear protective clothing.
Respiratory Protection: Recommended if ventilation is limited.

Engineering Measures/Controls:

Ventilation: Ensure adequate ventilation to maintain product at acceptable airborne levels.
Other measures: Eye-wash station.

Exposure Limits/Guidelines:

Material	CAS #	BASIS	TYPE	VALUE
None				

9 - Physical and Chemical Properties

Form and Appearance:	Clear, colorless to pale yellow liquid	Odor:	Characteristic
pH:	N/A	Odor Threshold:	N/D
Boiling Point:	~219°F (104°C)	Melting/Freezing point:	~ -5°F (-20.5°C)
Vapor Pressure:	N/D	Vapor Density (Air=1):	N/D
Flash Point:	N/A	Evaporation Rate:	N/D
UEL:	N/A	LEL:	N/A
Viscosity:	N/D	Solubility in Water:	Fully miscible
Octanol/Water Partition Coefficient:	N/D	Specific Gravity/ Bulk Density:	~ 1.16 @ 25°C
Auto-ignition temperature:	N/D	Decomposition Temperature:	N/D
Volatile content:	N/D	VOC Data:	N/D

10 - Stability and Reactivity

Chemical Stability: Product is stable under ordinary conditions of use and storage.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Extreme temperatures.
Incompatible Materials: Strong oxidizers, strong acids, light metals.
Hazardous Decomposition Products: Extremely high temperatures and thermal decomposition may produce CO_x.

11 - Toxicological Information

Acute Data:

Principle Routes of Exposure: Eye contact, skin contact, ingestion, inhalation (mist).

Acute Toxicity

Route of exposure:	Test type:	Species:	Results:	Comments:
Oral	LD50	Rat	>3500 mg/kg	H303: May be harmful if swallowed

Irritation and Corrosion

Target organ:	Species:	Results:	Comments:
Eyes	Rabbit	Mildly irritating	-
Skin	Rabbit	Non-irritating	-

Sensitization

Target organ:	Species:	Results:	Comments:
Skin	Human	Not sensitizing	-

Specific Target Organ Toxicity – Single Exposure

Target organ:	Species:	Results:	Comments:
Respiratory tract	Human	Mists, especially if heated, may cause mild irritation	-

Chronic Data:

Carcinogenicity

IARC	NTP	ACGIH	OSHA
No	No	No	No

Mutagenicity: NDA

Reproductive Effects: NDA

Target Organ Effects: NDA

12 - Ecological Information

Acute Aquatic Toxicity

Species:	Test type:	Exposure time:	Results:	Comments:
Fathead minnow	LC50	96h	>100 mg/l	Derived from product of similar composition
Daphnia magna	EC50	48h	>100 mg/l	Derived from product of similar composition

Environmental Fate

Persistence/Degradability:	This product is not readily biodegradable.
COD/BOD5:	NDA
Bioaccumulation Potential:	Not expected to bioaccumulate.
Mobility in Soil:	NDA
Other Adverse Effects:	NDA

13 - Disposal Considerations

Product:	Dispose of absorbed material/content and/or container in accordance with local, state, federal and/or international regulations.
Packaging:	NDA

14 - Transport Regulations

US DOT Regulations (Land Transport):

Proper Shipping Name:	Not regulated
Hazard Class:	Not regulated
UN Number:	Not regulated
Packing Group:	Not regulated
Label Required:	Not regulated
Other Information:	Not regulated

IATA/ICAO Regulations (Air Transport):

Proper Shipping Name:	Not regulated
Hazard Class:	Not regulated
UN Number:	Not regulated
Packing Group:	Not regulated
Label Required:	Not regulated
Other Information:	Not regulated

IMDG/IMO Regulations (Maritime Transport):

Proper Shipping Name:	Not regulated
Hazard Class:	Not regulated
UN Number:	Not regulated
Packing Group:	Not regulated
Label Required:	Not regulated
EMS Number:	Not regulated
Segregation Groups:	Not regulated
Marine Pollutant (Y/N):	Not regulated
Other Information:	Not regulated

15 - Regulatory Information

Domestic Regulations

Components requiring notification

SARA 302 (TPQ)	SARA 304 (RQ)	SARA 313	CERCLA (RQ)	CAA 112(b) HAPS	CAA 112(r)
None	None	None	None	None	None

SARA 311/312 Hazard Categorization: None.

State Information

California Proposition 65: May contain traces (< 100 ppm) of the following components known to the State of California to cause cancer, birth defects, or other reproductive harm.

None.

**State Right to Know/
Hazardous Substance List
Information:** The following chemicals are present on one or more Right to Know/Hazardous Substance Lists for the states of MA, MN, NJ, PA and RI.

None.

This is not an exhaustive list. For information on listings in other states, please consult that state's RTK/HSL.

Chemical Inventories

United States (TSCA)	EUROPE (EINECS/ELINCS/NLP)	Australia (AICS)	Philippines (PICCS)	Canada		Korea (ECL)	Japan (ENCS/ISHL)	China (IECSC)	New Zealand (NZIoC)
				DSL	NDSL				
Yes	Yes	No	No	No	Yes	No	NDA	Yes	Yes

16 - Additional Information

Key to Abbreviations:

NDA - No data available N/D - Not determined N/A - Not applicable N/E - Not established

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