CARUS®

CARUS 1200 WATER TREATMENT CHEMICAL

MATERIAL SAFETY DATA SHEET

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MSDS # CP-300 Revision Date: April 2012 Supercedes: March 2009

Section 1 Chemical Product and Company Identification

PRODUCT NAME: CARUS™ 1200 Water Treatment Chemical TRADE NAME: CARUS™ 1200 Water Treatment Chemical

SYNONYMS: Blended Phosphate solution

COMPANY NAME (US): COMPANY ADDRESS: 315 Fifth Street

Peru, IL 61354, USA

INFORMATION: (815) 223-1500

(815) 224-6816 (FAX) www.caruschem.com (Web) salesmkt@caruschem.com (Email)

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(815) 223-1500 (Other countries) CHEMTREC® (800) 424-9300 (USA)

(703) 527-3887 (Other countries)

Section 2 Hazards Identification

GLOBAL HARMONIZED SYSTEM (GHS) OF CLASSIFICATION OF THE PREPARATION

None

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

Signal Word: None Label Codes: None Hazard Statements: None

CARUS CORPORATION

OTHER HAZARDS:

Caution: eye, skin and respiratory tract irritant. Corrosive to metals.

Hazardous Materials Identification System (HMIS) Ratings:

Health: 2 - Temporary or Minor

Flammability: 0 - None Reactivity: 0 - None

Personnel Protective Equipment: goggles, face shield, apron, respirator and proper gloves.

Inhalation:

May cause irritation to the respiratory tract. Symptoms may include coughing and shortness of breath.

Ingestion:

Phosphates are slowly and incompletely absorbed when ingested, and seldom result in systemic effects. Such effects, however, have occurred. Symptoms may include vomiting, lethargy, diarrhea, blood chemistry effects, heart disturbances and central nervous system effects. The toxicity of phosphates is due to their ability to sequester calcium.

Skin Contact:

May cause irritation. May cause inflammation and pain on prolonged contact, especially with moist skin.

Eye Contact:

May cause irritation, redness and pain.

Chronic Exposure:

May sequester calcium and cause calcium phosphate deposits in the kidneys.

Aggravation of Pre-existing Conditions:

No information found.

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Section 3 Ingredients Information

Material	PEL	TLV	CAS.NO.	EC. NO.	%
Diphosphoric acid, tetrapotassium salt	No Data	No Data	7320-34-5	<u>230-785-7</u>	40-70
Other non-hazardous ingredients	No Data	No Data	N/A	N/A	30-60

EU LABEL

HAZARD SYMBOLS

None

RISK PHRASES

None

SAFETY PHRASES

None

This product contains no toxic chemicals subject to the reporting requirements of Section 313 – Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Section 4 First Aid Measures

Eyes:

Immediately flush eyes with large amounts of water for at least 15 minutes holding lids apart to ensure flushing of the entire surface.

Skin:

Immediately wash contaminated areas with water. Remove contaminated clothing and footwear. Wash clothing and decontaminate footwear before reuse.

Inhalation:

Remove person from contaminated area to fresh air.

Ingestion:

Never give anything by mouth to an unconscious or convulsing person. If person is conscious, give large quantities of water or milk. Seek medical attention immediately.

Section 5 Fire Fighting Measures

NFPA* Hazard Ratings:

Health: 2 = Moderately toxic material. Will have one or both of the following characteristics: Intense or

continued exposure could cause temporary incapacitation or possible residual injury unless

prompt medical treatment is given.

Flammability: 0 = Materials that will not burn.

Reactivity: 0 = Materials which in themselves are normally stable, even under fire exposure conditions, and

which are not reactive with water.

Special Hazard: None

*National Fire Protection Association 704

First Responders:

Wear protective gloves, boots, goggles, and respirator. In case of fire, wear positive pressure breathing apparatus.

Approach incident with caution.

Flash Point: None

Flammable or Explosive Limits: Lower: Nonflammable Upper: Nonflammable Extinguishing Media: Use large quantities of water. Dike to contain.



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Section 6 Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled:

Contain spill by collecting the liquid in a pit or holding behind a dam (sand or soil). Absorb with inert media and dispose of properly. Disposal of all materials shall be in full and strict compliance with all federal, state, and local regulations pertaining to phosphates. Flush area with large amounts of water.

Personnel Precautions:

Personnel should wear protective clothing suitable for the task.

Section 7 Handling and Storage

Work/Hygiene Practices:

Wash hands thoroughly with soap and water after handling phosphate solution, and before eating or smoking. Wear proper protective equipment. Remove clothing, if it becomes contaminated.

Ventilation Requirements:

Provide sufficient mechanical and/or local exhaust.

Conditions For Safe Storage:

Protect containers from physical damage. Store in a cool, dry area in closed containers. Do not transfer or store in aluminum containers.

Section 8 Exposure Controls and Personal Protection

Respiratory Protection:

In cases where overexposure to dust may occur, use any air purifying, and full-face piece respirator with an N-95 or better filter. Engineering or administrative controls should be implemented to control dust.

Eye:

Goggles or safety glasses with side shields should be worn. Provide eyewash in work area.

Gloves:

Rubber or plastic gloves should be worn.

Other Protective Equipment:

Normal work clothing covering arms and legs, and rubber, or plastic apron should be worn. Caution: If clothing becomes contaminated, wash off immediately.

Section 9 Physical and Chemical Properties

Appearance and Odor:	Colorless solution, odorless
Boiling Point, 760 mm Hg:	>101 °C
Freezing point, 760 mm Hg:	0 °C
Vapor Pressure (mm Hg):	N/A
Solubility In Water in % By Solution:	Miscible in all proportions
Percent Volatile by Volume:	40% (as water)
Evaporation Rate:	Same as water
Specific Gravity:	1.73 ± 0.03
pH:	10.9 ± 0.5

Section 10 Stability and Reactivity

Stability:	Under normal conditions, the material is stable.
Conditions To Avoid:	Do not expose to extreme temperatures
Incompatible Materials:	Soluble calcium salt solutions and hydrofluoric or
	Hydrofluosilicic acid could cause precipitations.
Hazardous Decomposition:	When involved in a fire, the material may form toxic fumes of
	phosphorous oxides.
Conditions Contributing to	Material is not known to polymerize.
Hazardous Polymerization:	



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Section 11 Toxicological Information

Acute Toxicity:

Irritating to body tissue with which it comes into contact.

CAS# 7320-34-5: Oral, rat: LD50 = 2444 mg/kg, >1000 mg/Kg

Acute Overexposure:

Irritating to body tissue with which it comes into contact.

Chronic Overexposure:

No known cases of chronic poisoning due to phosphate solutions have been reported.

Carcinogenicity:

None of the components has been classified as a carcinogen by OSHA, NTP, and IARC.

Medical Conditions Generally Aggravated by Exposure:

Phosphate solution will cause further irritation of tissue, open wounds, burns or mucous membranes.

Section 12 Ecological Information

None

Section 13 Disposal Considerations

Waste Disposal:

Disposal of all materials shall be in full and strict compliance with all federal, state, and local regulations pertaining to phosphates. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3.

RCRA P-Series: None listed. RCRA U-Series: None listed.

Section 14 Transport Information

USA (Land, D.O.T.)	Proper Shipping Name: Corrosive liquid, basic, inorganic,
European Labeling in accordance with EC directive	n.o.s. (Diphosphoric acid, tetrapotassium salt)
(Air, I.C.A.O.)	Hazard Class or Division: 8
	ID Number: UN 3266
	Packing Group: III
European Labeling in accordance with	ID Number: UN 3266
Road/Rail Transport (ADR/RID)	ADR/RID Class: 8
	Packing Group: III
	Description of Goods: Corrosive liquid, basic, inorganic,
	n.o.s. (Diphosphoric acid, tetrapotassium salt)
	Hazard Identification No. 80
European Labeling in accordance with EC directive	Proper Shipping Name: Corrosive liquid, basic, inorganic,
(Water, I.M.O.)	n.o.s. (Diphosphoric acid, tetrapotassium salt)
	Class/Division: 8
	ID Number: UN 3266
	Packing Group: III
	Marine Pollutant: No
	EmS: F-A, S-B



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Section 15 Regulatory Information

US FEDERAL

TSCA:

All components in this product are listed on the TSCA inventory.

Health & Safety Reporting List:

None of the chemicals in this product are on the Health & Safety Reporting List.

Chemical Test Rules:

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b:

None of the chemicals in this product are listed under TSCA Section 12b.

TSCA Significant New Use Rule:

None of the chemicals in this product have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs:

None of the chemicals in this product have an RO.

SARA Section 302 Extremely Hazardous Substances:

None of the chemicals in this product have a TPQ.

SARA Codes:

CAS # 7320-34-5: acute

Section 313:

None of chemicals in this product are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 or Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

State

None of the chemicals in this product are present on state lists from CA, PA, WI, MA, or NJ.

California Prop 65:

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

EU LABEL

HAZARD SYMBOLS

None

RISK PHRASES

None

SAFETY PHRASES

None

Avoid releases to the environment.

WGK (Water Danger/Protection): None

Canada - DSL/NDSL

CAS #7320-34-5 is listed on Canada's DSL List.

Canada - WHMIS

WHMIS Classification:

D2B - Poisonous and infectious material - Other effects - Toxic

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Section 15 Regulatory Information (contd.)

This product is classified as hazardous in accordance with the hazard criteria of the Controlled Products Regulations. **Canadian Ingredient Disclosure List**

None of the components in this product are listed on the Canadian Ingredient Disclosure List.

Section 16 Other Information

ADR/RID Agreement on Dangerous Goods by Road /Regulations Concerning the International Transport of

Dangerous Goods by Rail

CAS Chemical Abstract Service

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

EINECS Inventory of Existing Chemical Substances (European)

DOT Department of Transportation

DSL/NDSL The Domestic Substances and the Non-Domestic Substances List (Canada)

IARC International Agency for Research on Cancer
 IATA International Air Transport Association
 IMDG International Maritime Dangerous Goods
 OSHA Occupational Safety and Health Administration
 NIOSH National Institute for Occupational Safety and Health

NTP National Toxicology Program

MSHA Mine Safety and Health Administration

PEL Permissible Exposure Limit

SARA Superfund Amendments and Reauthorization Act

TDG Transport Dangerous Goods (Canada)

TSCA Toxic substances control Act

TLV-TWA Threshold Limit Value-Time Weighted Average

UN United Nations

WHMIS Workplace Hazardous Materials Information System

The information contained herein is accurate to the best of our knowledge. However, data, safety standards and government regulations are subject to change and, therefore, holders and users should satisfy themselves that they are aware of all current data and regulations relevant to their particular use of product. CARUS CORPORATION DISCLAIMS ALL LIABILITY FOR RELIANCE ON THE COMPLETENESS OR ACCURACY OR THE INFORMATION INCLUDED HEREIN. CARUS CORPORATION MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTIABILITY OR FITNESS FOR PARTICULAR USE OR PURPOSE OF THE PRODUCT DESCRIBED HEREIN. All conditions relating to storage, handling, and use of the product are beyond the control of Carus Corporation, and shall be the sole responsibility of the holder or user of the product.

This safety data sheet was reviewed according to Annex II of the regulation of the European Parliament and European Council (EC) No. 1907/2006-REACH and 1272/2008.

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