

# Material Safety Data Sheet

## Section 1 Product Identification

Product Name: **De-Scale/Rust Remover and Wash**  
 Formula type: Acid cleaner

Manufacturer's Name:  
 Chem-Tech, Inc.  
 6551 Jansen Avenue NE – Suite 106  
 Albertville, MN 55301

Emergency Telephone: 1-800-535-5053  
 Information: 1-763-417-1380  
 Fax: 763-417-1389

## Section 2 Hazardous Ingredients

<u>Chemical Name</u>	<u>CAS#</u>	<u>%</u>	<u>Threshold Limit Value</u>	<u>Permissible Exposure Limit</u>
Water	7732-18-5			
Phosphoric Acid	7664-38-2	30-40	1 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>

Balance of ingredients are not hazardous as defined by OSHA

## Section 3 Physical Data

Form:	Liquid	pH as is:	0.5 - 1.5
Color:	Green	pH (1% vol):	1.5 - 2.5
Odor:	Mild	Solubility in Water:	complete
Specific Gravity (Water = 1):	1.19 - 1.20 at 60°F	Vapor Density (Air = 1):	>1
Boiling Point °F:	approx 200 °F	% VOC:	<1.0
Evaporation Rate (Water = 1):	Similar to water	Vapor pressure:	ND

## Section 4 Fire and Explosion Information

Flash Point (Method) F:	Not flammable
Autoignition temperature:	ND
Unusual Fire and Explosion Hazards:	Contact with metal can form hydrogen gas that is flammable and can form explosive mixtures with air. Contact with water can liberate large amounts of heat.
Extinguishing Agents:	Foam, carbon dioxide, dry chemical, water fog, water
Fire fighting methods:	Evacuate area and fight fire from a safe distance. Ventilate area and use water spray to disperse gas or vapor and to protect personnel attempting to stop a leak. Use water spray to cool adjacent structures and to protect personnel. Shut off source of flow if possible. Stay away from storage tank ends. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of storage tank due to fire. Fire fighters must wear MSHA/NIOSH approved positive pressure breathing apparatus with full face mask and full protective equipment.

## Section 5 Health Hazard Data - Signs and Symptoms of Overexposure:

Probable Routes of Entry: Inhalation, eyes, skin

- Eyes:** Contact can cause severe irritation or burns if not treated immediately. Effects range from mild to irreversible damage and blindness depending upon length of exposure, solution concentration and first aid measures.
- Skin:** This product contains materials that cause severe skin irritation or burns. Prolonged or repeated contact may result in burns and irreversible damage. Prolonged exposure to diluted product can cause burns.
- Inhalation:** Overexposure by inhalation of misted product may irritate respiratory tract, producing a burning, choking sensation. Caution should be taken to prevent atomizing or misting of this product without proper respiratory protection.
- Ingestion:** Ingestion is not expected to be a primary route of exposure. Do not ingest. Material will cause severe burns in mouth, throat and stomach. Note: Aspiration is a secondary hazard and should be expected. Product may attack lining of esophagus and stomach. Can cause death.

Medical Conditions Aggravated by Exposure: Pre-existing skin diseases

## **Section 6 Emergency First Aid Procedures**

- Eyes:** Check for and remove contact lenses. Flush immediately with copious amounts of water for 15 minutes while holding eyelids apart to ensure complete irrigation of eye and eyelid tissues. Take exposed individual immediately to a health care professional, preferably an ophthalmologist, for emergency first aid and further evaluation.
- Skin:** Remove contaminated clothing. Immediately wash exposed area with copious amounts of water. Repeat washing. If redness or irritation occurs, seek immediate medical attention. Wash contaminated clothing before reuse.
- Inhalation:** If exposure by inhalation is suspected, immediately move exposed individual to fresh air. If individual experiences nausea, headache, dizziness, has difficulty breathing or is cyanotic, seek a health care professional immediately. Administer CPR if necessary.
- Ingestion:** Drink 1-2 large glasses of milk or water. Obtain immediate medical aid or call poison control. Do not induce vomiting unless directed by a physician. During vomiting there is a danger of aspirating liquid into lungs, causing serious damage and chemical pneumonitis. If spontaneous vomiting occurs, keep head below hips to prevent aspiration and monitor for breathing difficulty. Gastric lavage should be performed only by qualified medical personnel. Keep affected person warm and at rest. Seek immediate medical attention or call 911.

## **Section 7 Reactivity Data**

- Stability:** Stable under normal ambient storage conditions
- Incompatibility:** Avoid contact with other acids, bases and oxidizing materials. Mixing with base/caustic materials will generate heat and neutralize acids. Contact with metals can form flammable hydrogen gas. Contact with water can liberate large amounts of heat.
- Hazardous Decomposition Products:** Hydrogen gas can be liberated on contact with metals.
- Hazardous Polymerization:** Will not occur

## **Section 8 Spill & Leak Procedures**

- Procedures for Cleanup:** Wear safety equipment. For small spills, mop up and rinse with water.
- Large Spills:** Evacuate area. Block potential routes to water systems (sewers, streams, etc.) with dirt or sand. If possible, dilute acid concentration and slowly neutralize with sodium bicarbonate solution. Wash down affected areas with a mildly alkaline detergent and rinse with clear water. RCRA regulated. Call local Emergency Response agency to report spill.
- Waste Disposal:** Dispose in accordance with federal, state and local regulations. Waste subject to RCRA regulation.

**Section 9 Special Protection Information**

Ventilation Type Required: Use adequate ventilation when working with material in an enclosed area. Mechanical methods such as fume hoods or area fans may be used to reduce localized vapor/mist areas. If vapor or mist is generated when the material handled, adequate ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specified exposure.

Protective Gloves: Rubber, neoprene, and nitrile

Respiratory Protection: None required if airborne concentrations are maintained below threshold limits. Where misting and vapors may occur, wear an MSHA/NIOSH approved half mask form dust/mist air purifying respirator.

Eye Protection: Eye protection must be worn. Wear safety glasses with side shields and faceshield or vented/splash proof goggles.

Other Equipment: Eye wash station. Rubber boots for spill cleanup.

**Section 10 Special Precautions**

Product should not be stored above 100°F. Store out of direct sunlight. Keep out of reach of children. Keep container closed when not in use. For industrial and institutional use only. Mix only with water. Thoroughly rinse empty containers before disposal. Use only in well ventilated area. Do not breathe vapors. Wash hands thoroughly after handling.

**Section 11 Toxicity Data****Toxicity:**

<u>Ingredient</u>	<u>LD50 – Oral Rat</u>	<u>LD50 – skin absorption</u>	<u>LC50 - Inhalation</u>	<u>Effects</u>
Phosphoric Acid	1530 mg/kg	ND	ND	Corrosive

**Carcinogenicity:**

<u>Ingredient</u>	<u>NTP</u>	<u>IARC</u>	<u>OSHA</u>
Phosphoric Acid	No	No	No

**Other effects:**

<u>Ingredient</u>	<u>Reproductive Toxicity</u>	<u>Teratogenicity</u>	<u>Mutagenicity</u>
Phosphoric Acid	ND	ND	ND

**Section 12 Ecological Information****Ingredient**

Phosphoric Acid When released into the soil, this material may leach into groundwater. When released to water, acidity may be readily reduced by natural water hardness minerals.

**Section 13 Hazard Rating - HMIS**

0 = minimal    1 = slight    2 = moderate    3 = serious    4 = severe

Health: 2    Reactivity: 1    Fire: 0    Personal protection equipment: B (gloves and glasses)

**Section 14 Regulatory Information****• Chemical Inventory Status - part 1 •**

<u>Ingredient</u>	<u>TSCA</u>	<u>EC</u>	<u>Japan</u>	<u>Australia</u>
Phosphoric Acid	Yes	Yes	Yes	Yes

• **Chemical Inventory Status – part 2 •**

Ingredient	-----Canada-----			Philippines
	Korea	DSL	NDSL	
Phosphoric Acid	Yes	Yes	No	Yes

• **Federal, State & International Regulations – part 1 •**

Ingredient	---- SARA 302 ----		----- SARA 313 -----	
	RQ	TPQ	List	Chemical Catg.
Phosphoric Acid	No	No	No	No

• **Federal, State & International Regulations – part 2 •**

Ingredient	CERCLA	RCRA 261.33	TSCA 8(d)
	Phosphoric Acid	5000	No

**Chemical Weapons Convention:** No **TSCA 12(b):** No **CDTA:** No

**SARA 311/312:** **Acute:** Yes **Chronic:** No **Fire:** No **Pressure:** No


**Reactivity:** No

**Section 15 Shipping Name:**

DOT Class: Corrosive liquid, acidic, inorganic, n.o.s., (phosphoric acid), 8, UN3264, PG III

**Section 16 WHMIS**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

<u>Class</u>	<u>Description</u>	<u>Symbol</u>
E	Corrosive material	

**Section 17 Documentary Information**

Date issued: 11-21-06 Supercedes: 1-17-06 Reason for update: Total update  
 Prepared by: S. VanGrasstek Title: Chem-Tech Lab Manager Phone: 763-417-1380

**ABBREVIATIONS:**

NE = NOT ESTABLISHED

NDA = NO DATA AVAILABLE

> = GREATER THAN

<= LESS THAN

BCF = BIOCONCENTRATION FACTOR

ND = NO DATA

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