

# MATERIAL SAFETY DATA SHEET from STEARNS PACKAGING CORPORATION

## SECTION I—PRODUCT/MANUFACTURER'S IDENTITY

IDENTITY (As Used On Label and List):

**Power Team Acid Rinse**

**SYNONYMS:** ST-115, ST-116, ST-117, ST-118

**FORMULA ID NUMBER:** AM25

**EPA REG #:** None

**NSF CERTIFIED:** None

**COMPANY:** STEARNS PACKAGING CORPORATION  
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HAZARD RATING		
0	Flammability	4 = Extreme
2	Health	3 = High
1	Reactivity	2 = Moderate
Acid	Special Hazard	1 = Slight
		0 = Insignificant

**For Transportation Emergency Involving Hazardous Materials Contact: CHEM-TEL 1 (800) 255-3924**

**Shipping Information:**

**DOT SHIPPING NAME:** Corrosive liquid, acidic, inorganic, n.o.s., (phosphoric acid and sulfuric acid), 8, UN3264, PGI. Class 55

**DOT SHIPPING NUMBER:** UN3264

**HAZARD LABEL:** Corrosive

**HAZARD CLASS:** 8, Corrosive

## SECTION II—HAZARDOUS INGREDIENTS OR IDENTITY INFORMATION

### HAZARDOUS CHEMICAL IDENTITY &

<u>CAS#</u>	<u>HAZARD</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>OTHER LIMITS</u>	<u>% (OPTIONAL)</u>
▶ Phosphoric acid 7664-38-2	Corrosive	1 mg/cu m	1 mg/cu m	3 mg/cu m (STEL)	15-20%
▶ Sulfuric acid 7664-93-9	Corrosive	1 mg/m <sup>3</sup>	0.2 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> (REL)	10-15%

SARA SECTION 313 TITLE III NOTIFICATION REQUIRED: Yes; CHEMICAL IN PRODUCT: Phosphoric acid; CAS#: 7664-38-2; WEIGHT % OF CHEM: 15-20; RQ = 5,000#

SARA SECTION 313 TITLE III NOTIFICATION REQUIRED: Yes; CHEMICAL IN PRODUCT: Sulfuric acid; CAS#: 7664-93-9; WEIGHT % OF CHEM: 10-15; RQ = 1,000#

## SECTION III—PHYSICAL/CHEMICAL CHARACTERISTICS

<b>BOILING POINT:</b>	>100°C	<b>VAPOR PRESSURE (mm Hg):</b>	Not Determined
<b>SPECIFIC GRAVITY (WATER=1):</b>	1.176	<b>VAPOR DENSITY (AIR=1):</b>	>1
<b>FREEZING POINT:</b>	<0°C	<b>EVAPORATION RATE:</b>	Not Determined
<b>SOLUBILITY IN WATER:</b>	Complete	<b>pH (CONCENTRATE):</b>	< 0.50
<b>APPEARANCE AND ODOR:</b>	Red, clear liquid; Slight acid odor	<b>pH (1% SOLUTION):</b>	Not Determined
<b>CORROSIVITY</b>	Carbon steel and aluminum		

## SECTION IV—FIRE AND EXPLOSION HAZARD DATA

<b>FLASH POINT (METHOD USED):</b>	Non-combustible, >200°F
<b>EXTINGUISHING MEDIA:</b>	CO <sub>2</sub> , water, dry chemical to surround material to cool.
<b>FLAMMABLE LIMITS:</b>	LEL: Not Applicable UEL: Not Applicable
<b>SPECIAL FIRE FIGHTING PROCEDURES:</b>	Use full protective clothing and self-contained breathing apparatus. Thermal decomposition emits toxic fumes of oxides of phosphorous and sulfur. Neutralize run-off with lime or soda ash to prevent corrosion of metals and formation of hydrogen gas.
<b>FIRE &amp; EXPLOSION HAZARDS:</b>	Phosphoric and sulfuric acid can react with metals in a fire to produce hydrogen gas, which is flammable.

## SECTION V—REACTIVITY DATA

<b>STABILITY:</b>	Stable
<b>INCOMPATIBILITY (MATERIALS TO AVOID):</b>	Sulfuric acid and phosphoric acid. Sulfuric acid reacts with alkaline solutions, metal powder, carbides, chlorates, fulminates, nitrates, picrates, strong oxidizing or reducing materials, combustible organic materials. Hazardous gases are evolved on contact with chemicals such as cyanides, sulfides, and carbides. Phosphoric acid reacts with sodium tetrahydroborate. Exothermic reactions with aldehydes, amines, amides, alcohols, and glycols, azo-compounds, carbamates, esters, caustics, phenols, cresols, ketones, organophosphates, epoxides, explosives, combustible materials, unsaturated halides, and organic peroxides. Phosphoric acid forms flammable gases with cyanides, sulfides, fluorides, organic peroxides, and halogenated organics. Mixtures with nitromethane are explosive.
<b>HAZARDOUS DECOMPOSITION OR BYPRODUCTS:</b>	At flame temperatures, it may emit toxic phosphorous oxide fumes, toxic sulfur oxide fumes, and flammable hydrogen gas.
<b>CONDITIONS TO AVOID:</b>	Heat; possibility of decomposition and release of gases. Any incompatible materials above.
<b>HAZARDOUS POLYMERIZATION:</b>	Will not occur

## SECTION VI—HEALTH HAZARD DATA/FIRST AID PROCEDURES

**HEALTH HAZARDS (ACUTE AND CHRONIC):** Irritation or corrosion may occur to exposed tissues, especially eyes, skin, throat, nasal cavities and other mucous membranes from contact with the product, its use solutions, or mists and vapors generated by the product. Eye contact may cause blindness. Ingestion may be harmful or fatal if large quantities are ingested.

**CARCINOGENICITY:** NTP: No in the solution form. Sulfuric acid mists may cause cancer.

IARC Monographs: Proven (Human, Group 1).

ACGIH Regulated: Suspected (Human, Group A2)

**SIGNS AND SYMPTOMS OF OVEREXPOSURE:** Irritation of exposed tissues. Chronic exposure causes burns. Eyes, skin and mucous membranes may be simultaneously irritated or burned if exposed to mists of product or solutions.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Laryngeal irritation. Skin conditions or eye problems. People with impaired respiratory function.

### EMERGENCY AND FIRST AID PROCEDURES:

**Eyes:** If contact with eyes occurs, flush with plenty of cool water for 15 minutes. Remove contact lenses. Consult a physician.

**Skin:** May be irritating to skin. If contact occurs, flush with water and wear gloves in the future to minimize exposure. Wash hands thoroughly after handling. Discontinue use if irritation persists and consult a physician. Wash contaminated clothing.

**Inhalation:** Remove from exposure. Obtain medical attention immediately if difficulty breathing. Possibility of respiratory tract irritation.

**Ingestion:** May be harmful if swallowed. If ingested, drink large amounts of water or milk. **DO NOT** induce vomiting. Get medical attention immediately. Avoid contamination of foods.

**Note to Physician:** Extremely corrosive agent which will burn any exposed tissues upon other than very brief contact. Eyes, skin, and mucous membranes should be flushed thoroughly with water, and ophthalmologic consultation should be obtained for any corneal burns. In case of ingestion, immediate dilution with water, milk or demulcent liquids is worthwhile, but attempts to neutralize with a base should be avoided because of excessive base and heat formation, which may increase the threat of esophagogastric perforation. Vomiting and diarrhea (laxative effect of phosphates) are to be expected with large doses. Parenteral fluid administration may be needed if losses therefrom are severe, or if shock ensues. Supportive care may be needed for such other complications as glottal edema, hematemesis and perforation (unlikely). Induced vomiting should be avoided because local tissue injury may be aggravated, but the patient should be watched hyperphosphatemia and hypocalcemia. Milk or other demulcent liquids may be worthwhile for gastric irritation.

**WARNING STATEMENTS:** **DANGER! CORROSIVE.** Causes severe irritation and burns to every area of contact. Harmful if swallowed or inhaled. Keep out of reach of children.

## SECTION VII—PRECAUTIONS FOR SAFE HANDLING AND USE

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Wear acid-resistant suit and complete protective equipment including rubber gloves, boots, chemical goggles and faceshield. Small spills: mop up and dispose of in DOT-approved waste containers. Large spills: Contain by diking with soil or other absorbent material and carefully neutralize with soda ash or lime. If soda ash is used, provide adequate ventilation to dissipate carbon dioxide gas. Keep unneutralized material out of sewers, storm drains, surface waters, and soil.

**WASTE DISPOSAL METHOD:** Waste disposal must be done in accordance with all local, city or municipality, county, state, and federal regulations. Consult your state department of natural resources or the EPA for specific questions not answerable through other sources. Wastewater should never enter a fresh water body without treatment. If material cannot be salvaged, an acceptable method of disposal is neutralization followed by discharge into treatment system with large amounts of water.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Store in a dry, well-ventilated place. Do not mix with other chemicals or cleaning agents. Do not mix with bleach; toxic fumes will be emitted. Keep stored away from heat, sparks, and flames. Do not store in carbon steel or aluminum containers. Do not use undiluted in sewer or drain due to corrosive properties.

**OTHER PRECAUTIONS:** Empty containers may have residues, gases, and mists, and are subject to proper waste disposal, as above. Always obey hazard warnings and handle empty containers as if they were full. Do not reuse containers for other purposes. Always keep product out of the reach of children.

## SECTION VIII—OTHER REGULATORY INFORMATION

**State of California Prop 65:** Sulfuric Acid Mist

Acidic run-off water may be harmful to flora, fauna, and aquatic life.

## SECTION IX—CONTROL MEASURES

**RESPIRATORY PROTECTION:** In general, respirators are not needed if the product is used in a well-ventilated area. However, use of a NIOSH/MSHA respirator may be a good common sense approach to working with products where dusts and mists are known to cause irritation of the eyes and/or mucous membranes.

**VENTILATION:** Local Exhaust: Recommended to keep exposure below airborne exposure limits.

Mechanical (General): Recommended to keep exposure below airborne exposure limits.

**SKIN PROTECTION:** Neoprene, rubber, or other chemical resistant gloves. Wear protective clothing to prevent repeated or prolonged contact.

**EYE PROTECTION:** Splash goggles, or safety glasses if splashing is not a concern.

**WORK/HYGIENIC PRACTICES:** As good hygiene dictates.

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