

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product Name: SpeedyBright™
Product Codes(s): SpeedyBright
Synonyms: Aqueous o-phosphoric acid solution
REACH Registration Number: No data available

1.2 Relevant identified uses of the substance or mixture and uses advised against

General Use: Descaler/lime scale remover
Uses advised against: No uses advised against

1.3 Details of the supplier and of the safety data sheet

Manufacturer/Distributor
 SpeedClean
 404 West Avenue
 Stamford, CT 06902 USA
 Toll free: +1-800-700-3540


1.4 Emergency telephone number: Chemtrec (24 hours) +1-800-424-9300

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

Product definition: Mixture
Classification in accordance with 28 CFR 1910 (OSHA HCS) and Regulation (EC) No 1272/2008
 Skin Irritation - Category 2 [H315]
 Eye Irritation - Category 2A [H319]

2.2 Label Elements

Hazard symbol(s): 
 GHS07

Signal word: Warning

Hazard statement(s): H315 - Causes skin irritation
 H319 - Causes serious eye irritation

Precautionary statements:

[Prevention] P264 - Wash hands or other skin areas contacting this product thoroughly after handling.
 P280 - Wear protective gloves and eye protection.
 P261 - Avoid breathing mist and spray.

[Response] P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
 P321 - Specific treatment: Seek immediate medical attention; refer to product label or Section 4 of this SDS.
 P332 + P313 - If skin irritation occurs: Get medical attention.
 P362 - Take off contaminated clothing and wash before reuse.
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337 + P313 - If eye irritation persists: Get medical attention.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

% by Weight	Ingredient	CAS Number	EC Number	Index Number	GHS Classification
10 - 20	o-Phosphoric Acid	7664-38-2	231-633-2	015-011-00-6	H314
80 - 90	Water	7732-18-5	231-791-2	-----	-----

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

SECTION 4 - FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: If product mist or spray causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. If symptoms persist or become worse, seek medical attention immediately.

Eyes: Immediately flush eyes with large amounts of water for 15 minutes, occasionally lifting upper and lower lids. Remove contact lenses, if present and easy to do, after first 2 minutes and continue rinsing. Obtain immediate medical attention, preferably from an ophthalmologist.

Skin: Flush skin with large amounts of water while removing contaminated clothing, and continue rinsing for at least 15 minutes. Wash affected area with soap and water. Wash contaminated clothing and shoes thoroughly before reuse. Seek prompt medical attention if irritation persists.

Ingestion: Rinse mouth with water if victim is conscious. Remove dentures, if present. Give 1 - 2 cupfuls of milk or water to drink. If victim is conscious, alert and able to swallow. Do not induce vomiting unless directed to do so by medical personnel. Do not leave victim unattended. To prevent aspiration of swallowed material lay victim on one side with the head lower than the waist. Vomiting may occur spontaneously. Never give anything by mouth to an unconscious person. Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

Potential health symptoms and effects

Eyes: Causes serious eye irritation with redness, pain, tearing and swelling. May cause burns to eyes and surrounding tissue.

Skin: Causes skin irritation with redness, itching, discomfort and possible burns.

Inhalation: Inhalation of mist causes irritation of and possible burns to the respiratory tract. Material has a low vapor pressure, so exposure to vapor is not likely.

Ingestion: Causes irritation of and possible burns to the gastrointestinal tract with nausea, vomiting, abdominal pain and diarrhea.

Chronic: No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Advice to Doctor and Hospital Personnel: Treat symptomatically and supportively.

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishable media

Suitable methods of extinction: Use extinguishing media suitable for surrounding fire.

Unsuitable methods of extinction: None known

5.2 Special hazards arising from the substance or mixture

Closed containers may explode due to the buildup of pressure when exposed to extreme heat. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent or may be delayed. Obtain medical attention.

Explosion hazards: Material does not present an explosion hazard.

5.3 Advice for firefighters

Full protective equipment including self-contained breathing apparatus should be used. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat. If possible, firefighters should control runoff water to prevent environmental contamination.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear appropriate protective clothing designated in Section 8. Ventilate the area.

6.2 Environmental precautions

Avoid dispersal of spilled material or runoff and prevent contact with soil and entry into drains, sewers or waterways.

6.3 Methods and materials for containment and cleaning up

Cover drains and contain spill. Cover spill with a large quantity of inert absorbent. Do not use combustible material such as sawdust. Collect material and place into an approved container for proper disposal. Observe possible restrictions (Sections 7.2 and 10.5). Do not allow material or runoff from rinsing contaminated areas to enter floor drains or storm drains and ditches which lead to waterways. Dispose of waste via a licensed waste disposal contractor.

6.4 Reference to other sections

For indications about waste treatment, see Section 13.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling

Wear all appropriate personal protective equipment specified in Section 8. Do not get in eyes or on skin or clothing. If normal use of material presents a respiratory hazard, use only adequate ventilation or wear an appropriate respirator.

Advice on protection against fire and explosion

Not expected to be a fire or explosion hazard

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10.5), food and drink. Transfer only to approved containers having correct labeling. Keep container tightly closed when not in use. Protect container against physical damage. Containers that been opened must be carefully resealed and kept upright to prevent spillage. Containers of this material may be hazardous when empty as they contain product residues. Use appropriate containment to avoid environmental contamination. Ventilate closed areas. Do not take internally. Keep out of reach of children.

7.3 Specific end uses

Apart from the uses mentioned in Section 1.2, no other specific uses are stipulated.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits

CAS Number	Ingredient	OSHA	ACGIH	NIOSH
7664-38-2	Phosphoric Acid	1 mg/m ³ TWA	1 mg/m ³ TWA 3 mg/m ³ STEL	1 mg/m ³ TWA; 3 mg/m ³ STEL 1,000 mg/m ³ IDHL

8.2 Exposure controls

Engineering Measures: Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Use adequate ventilation. Local exhaust is preferable. Refer to See Section 7.1.

Individual protection measures: Wear protective clothing to prevent repeated or prolonged contact with product. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the representative supplier.

Hygiene measures: Facilities storing or using this material should be equipped with an eyewash station and safety shower. Change contaminated clothing. Preventive skin protection is recommended. Wash hands thoroughly after use, before eating, drinking or using the lavatory.

Eye/face protection: Wear protective goggles or safety glasses with unperforated side shields during use. Refer to 29 CFR 1910.133, ANSI Z87.1 or European Standard EN 166.

Hand Protection: Wear rubber gloves or gloves recommended by glove supplier for protection against materials in Section 3. Gloves should be impermeable to chemicals and oil. Breakthrough time of selected gloves must be greater than the intended use period.

Other protective equipment: Protective clothing. Wear protective boots if the situation requires.

Respiratory Protection: None required with normal use. Always use an approved respirator when vapor/aerosols are generated. Where risk assessment shows air-purifying respirators are appropriate use a full-faced respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Environmental exposure controls: Do not empty into drains.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Clear, light green liquid
Odor	Odorless
Odor Threshold	Not determined
Molecular Weight	Not applicable
Chemical Formula	Not applicable
pH	<2
Freezing/Melting Point	-10 °C (14 °F)
Boiling Point, Range	135 - 158 °C (275 - 316 °F)
Evaporation Rate	Not determined
Flammability (solid, gas)	Not applicable
Flash Point	Not applicable
Autoignition Temperature	Not determined
Decomposition Temperature	Not determined
Lower Explosive Limit (LEL)	Not determined
Upper Explosive Limit (UEL)	Not determined
Vapor Pressure	2.16 - 5.65 mm Hg @ 20 °C
Vapor Density	Not determined
Specific Gravity	1.079 - 1.081 @ 25 °C
Viscosity	Not determined
Solubility in Water	Complete
Partition Coefficient: n-octanol/water	Not applicable
Volatiles by Volume @ 21 °C	100%

9.2 Other data

No data available

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

No special reactivity has been reported.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4 Conditions to avoid

Extreme temperatures. Contact with incompatible materials.

10.5 Incompatible materials

Strong oxidizing agents, strong reducing agents, acids, alkalis, fluorine

DO NOT add water to the acid. ALWAYS add the acid to water while stirring to prevent release of heat, steam and fumes.

10.6 Hazardous decomposition products

Thermal decomposition products include oxides of phosphorus, phosphine oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Oral Toxicity

LD50 - Oral, rat: 1,530 ml/kg (Phosphoric Acid)

Acute inhalation toxicity

LC50 - Inhalation, rat: 25.5 mg/m³ (Phosphoric Acid)

Acute dermal toxicity

LD50 - Skin, rabbit: 2,740 mg/kg (Phosphoric Acid)

Skin irritation

Causes skin irritation.

Eye irritation

Causes serious eye irritation.

Sensitization

No data available

Genotoxicity in vitro

No data available

Mutagenicity

No data available

Specific organ toxicity - single exposure

No data available

Specific organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

11.2 Further information

The components in this product are not listed as carcinogens by ACGIH, IARC, NTP or OSHA. No data is available regarding the mutagenicity or teratogenicity of this product, nor is there any available data that indicates that it causes adverse developmental or fertility effects.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity

Phosphoric Acid is harmful to aquatic life in high concentrations. Large discharges of this product to the environment may decrease the pH of aquatic systems to a value <2, which may be fatal to aquatic life and soil micro-organisms.

12.2 Persistence and degradability

Contains inorganic substances, which are not biodegradable. Methods for determining biodegradability are not applicable to inorganic substances.

12.3 Bioaccumulation potential

Material is not expected to bioaccumulate.

12.4 Mobility

The acidity of phosphoric acid may be reduced readily by natural water hardness minerals, but the phosphate may persist indefinitely. During transport through soil, phosphoric acid will dissolve some of the soil material, in particular carbonate-based materials. The acid will be neutralized to some degree with absorption of the proton and phosphate ions also possible. However, significant amounts of acid will remain for transport down toward the groundwater table.

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

Additional ecological information

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Do not allow material to run into surface waters, wastewater, sewers or soil.

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Methods of disposal: The generation of waste should be avoided or minimized whenever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Hazardous waste: The classification of this product may meet the criteria for a hazardous waste.

SECTION 14 - TRANSPORT INFORMATION

Note: Transportation information provided is for reference only. Customer is urged to consult 49 CFR 100 - 177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

US DOT (Domestic Ground Transportation)

Proper Shipping Name: Phosphoric Acid Solution
Hazard Class: 8
UN/NA: UN1805
Packing Group: III
NAERG: Guide #154
Packaging Authorization: Non-Bulk: 49 CFR 173.203; Bulk: 173.241
Packaging Exceptions: 49 CFR 173.154



IMO/IMDG (Water Transportation)

Proper Shipping Name: Phosphoric Acid Solution
Hazard Class: 8
UN/NA: UN1805
Packing Group: III
Marine Pollutant: No
EMS Number: F-A, S-B

ICAO/IATA (Air Transportation)

Proper Shipping Name: Phosphoric Acid Solution
Hazard Class: 8
UN/NA: UN1805
Packing Group: III
Quantity Limitations: 49 CFR 175.27 and 175.75 - Cargo Aircraft Only: 60 L; Passenger Aircraft: 5 L

RID/ADR (Rail Transportation)

Proper Shipping Name: Phosphoric Acid Solution
Hazard Class: 8
UN/NA: UN1805
Packing Group: III

SECTION 15 - REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for substance or mixture

U. S. Federal Regulations

OSHA Hazard Communication Standard: This material is classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

OSHA Process Safety Management Standard: Components of this product are not regulated under OSHA PSM Standard 29 CFR 1910.119.

EPA Risk Management Planning Standard: Components of this product are not regulated under EPA RMP Standard (RMP) 40 CFR Part 68.

TSCA Status: All components of this product are listed on the Toxic Substance Control Act (TSCA) Inventory. This material is not subject to TSCA 12(b) Export Notification.

Superfund Amendments and Reauthorization Act (SARA)

SARA Section 311/312 Hazard Categories: Acute Health Hazard

SARA 313 Information: None of the chemicals in this product exceed the threshold (de minimis) reporting levels established by Section 313 of the Emergency Planning and Community Right-to Know Act of 1986.

SARA 302/304 Extremely Hazardous Substance

No components of the product exceed the threshold (de minimis) reporting levels established by of these sections of Title III of SARA.

SARA 302/304 Emergency Planning & Notification

No components of the product exceed the threshold (de minimis) reporting levels established by of these sections of Title III of SARA.

Comprehensive Response Compensation and Liability Act (CERCLA): This product contains the following CERCLA reportable substances:

Phosphoric Acid (CAS #7664-38-2), RQ - 2,267.96 kg (5,000 lbs)

Clean Air Act (CAA)

This product does not contain any chemicals that are listed as Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b).

This product does not contain any Class 1 Ozone depleters.

This product does not contain any Class 2 Ozone depleters.

Clean Water Act (CWA)

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.

U.S. State Regulations

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986

This product contains no chemical(s) known to the State of California to cause cancer, birth defects or other reproductive harm.

Other U.S. State Inventories

Phosphoric Acid (CAS #7664-38-2) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: CA, DE, ID, MA, MN, NJ, NY, PA, WA, WI.

Canada

WHMIS Hazard Symbol and Classification



E - Corrosive

Canadian National Pollutant Release Inventory (NPRI): None of the chemicals in this product are listed on the NPRI.

European Economic Community

Labeling (67/548/EEC or 1999/45/EC)



Xi - Irritant

Risk Phrases: R36/38 - Irritating to eyes and skin.

Safety Phrases: S2 - Keep out of the reach of children.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37/39 - Wear suitable gloves and eye/face protection.

WGK, Germany (Water danger/protection): 1

Global Chemical Inventory Lists

Country	Inventory Name	Inventory Listing*
Canada:	Domestic Substance List (DSL).	Yes
Canada:	Non-Domestic Substance List (NDSL).	No
Europe:	Inventory of New and Existing Chemicals (EINECS)	Yes
United States:	Toxic Substance Control Act (TSCA)	Yes
Australia:	Australian Inventory of Chemical Substances (AICS)	Yes
New Zealand:	New Zealand Inventory of Chemicals (NZIoC)	Yes
China:	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Japan:	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea:	Existing Chemicals List (ECL)	Yes
Philippines:	Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Yes

*Yes - All components of this product are in compliance with the inventory requirements administered by the governing country.

No - one or more components of this product are not on the inventory and are not exempt from listing.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

SECTION 16 - OTHER INFORMATION

Hazardous Material Information System (HMIS)

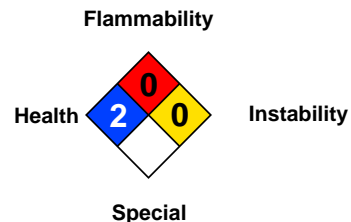
Health	2
Flammability	0
Physical Hazard	0
Personal Protection	C

HMIS & NFPA Hazard Rating Legend

* = Chronic Health Hazard 2 = MODERATE
 0 = INSIGNIFICANT 3 = HIGH
 1 = SLIGHT 4 = EXTREME



National Fire Protection Association (NFPA)



Full text of GHS Hazard Phrases referenced in Section 3 (not covered in Section 2)

H314 - Causes severe skin burns and eye damage

SpeedClean assumes no legal responsibility or liability from the described product's use. All chemicals possess unknown potential hazards. The information herein should be used only to supplement the end user's existing knowledge. Read directions for proper use. This SDS was written for the product as packaged. Cleaning Contractors shall comply with all applicable OSHA regulations.

Revision 1: 23 March 2015

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