SAFETY DATA SHEET

Sanchem 555

Section 1 – Identification

GHS product identifier	: Sanchem 555
Product Code	: 5052-C
Other means of identification	: Not available
Product type	: Liquid

Relevant indentified areas of uses of the substance of mixture and uses advised against Identified uses: Metal cleaner & surface activator

Uses advised against: Not available	Reason:	
Supplier's details	: Sanchem Inc 1600 S. Canal St Chicago, IL 60616	
Emergency Telephone Number:	24 hr. Chemtrec 1-800-424-9300	

Section 2 – Hazard identification

OSHA/HCS status

Skin Corr. 1B

H314 Causes severe skin burns and eye damage.

Prevention:

P260 Do not breathe dust/fume/gas/mist/vapors/spray P280 Wear Protective gloves/protective clothing/eye protection / face protection

Response:

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

Section 3 – Composition/information on ingredients				
Composition				
<u>Substance</u> Phosphoric Acid	<u>CAS No.</u> 7664-38-2	<u>%w/w</u> 20-50	EINECS No. 231-633-2	<u>Risk Phrase</u> R34
C-1-4		N <i>T</i> 1		

Substance/mixture : Mixture

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.

Occupational exposure limits, if available, are listed in Section 8.

Section 4 – First aid measures

<u>General</u>	This material is an acid; treatment is symptomatic and supportive. Phosphoric acid has irritating effects to mucous membranes.
Eve contact	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove any contact lenses. Get medical attention. If irritation persists, contact an ophthalmologist.
<u>Skin contact</u>	May cause skin irritation. Wash effected area with plenty of soap and water. Get medical attention.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
Ingestion	IF SWALLOWED, do NOT induce vomiting. Give victim 2-4 glasses of water to drink. Get medical attention. Contact a Poison Control Center. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

Section 5 – Fire-fighting measures

Extinguishing media	Not combustible. No special requirements.
Unsuitable extinguishing media	Non-combustible. No special requirements.
Exposure hazard	Not combustible. May give off toxic fumes (oxides of phosphorus) in a fire. May react with metal; to liberate hydrogen, a flammable gas.
Protective equipment	Firefighters should wear self-contained breathing apparatus & personal protective clothing (PPC).

Section 6 – Accidental release measures

Personal precautions	Avoid unnecessary exposure and remove all material from eyes, skin and clothing. Do not ingest or inhale mists of phosphoric acid.
Environmental precautions	Small quantities: Avoid discharge into the environment Large quantities: May cause pollution. Avoid discharge into the environment. Note methods for cleaning up in the next section.
<u>Methods for cleaning up</u>	Contain large spills with dikes and transfer the material to appropriate containers for reclamation or disposal. Absorb remaining material or small spills with an inert material and then place in a chemical waste container. Neutralize washings with a base such as soda ash or lime. Flush residual spill area with large amounts of water.

Refer to Section 13 for disposal information and Sections 14 and 15 for reportable quantity information.

Section 7 – Handling and storage

<u>Handling</u>	Do not get in eyes, on skin, or on clothing. Avoid breathing mist or vapor. Do not taste or swallow. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.	
Engineering measures	Provide natural or mechanical ventilation to minimize exposure. The use of local mechanical exhaust ventilation is preferred at sources of air contamination such as open process equipment Consult National Fire Protection Association (NFPA) Standard 91 for design of exhaust systems.	
<u>Storage</u>	Store in plastic, rubber-lined, or 316L stainless steel tanks designed for Phosphoric Acid. Store drums away from heat and out of direct sunlight. Store in a well-ventilated dry area away from alkalis and most metals. Store above freezing point. Contact with reactive metals, i.e. mild steel and aluminum may generate hydrogen that may form and explosive mixture in storage vessels.	
Section 8 – Exposure controls/personal protection		

Occupational Exposure Limits

State United States Occupa	<u>Standard</u> <u>Limit</u> tion Exposure Limit 1 mg/m ³ 8-hr. TWA, 3 mg/m ³ STEL	
Respiratory protection	Avoid breathing vapor or mist. Use NIOSH/MSHA approved respiratory protection equipment (full face piece recommended) when airborne exposure limits are exceeded (see below). If used, full-face piece replaces the need for face shield and/or chemical goggles. Refer to U.S. OSHA regulations 29 CFR 1910.134	
Hand/Skin protection	Wear impervious protective gloves and clothing to prevent contact to skin. Wash immediately if skin is contaminated. Remove contaminated clothing promptly and launder before reuse. Clean personal protective equipment before reuse. Provide a safety shower at any location where skin contact can occur. Wash thoroughly after handling.	
Eve protection	Wear chemical goggles, a face shield, and if necessary, a full face respirator when conditions warrant or exceed the Occupation Exposure Limit. Refer to U.S. OSHA regulations 29 CFR 1910.133.	

Section 9 – Physical and chemical properties

General information

Clear to yellow color, syrupy liquid Soapy 0.0285 mm Hg @ 20 °C Complete 1.2-2.0 100 C/ 212 F -17.5 C/ 1 F
1.27

Section 10 – Stability and reactivity

Product is stable under normal conditions of storage and handling.

Conditions to avoid Incompatible materials

<u>Materials to avoid</u> Avoid contact with metals (such as mild steel and aluminum), which may liberate flammable hydrogen gas that can produce an explosion in confined vessels. Avoid contact with materials such as sulfides and sulfites, which could release toxic gases. Be cautious in mixing with strong bases because high heat of reaction can generate steam.

Hazardous decomposition Phosphorus oxides may form when heated to decomposition.

Section 11 – Toxicological information

This material has been defined as a hazardous chemical under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Laboratory data Data from single-dose (acute) animal studies with this material are given below:

Oral - rat LD_{50} :	3,500 mg/kg; slightly toxic
Dermal - rabbit LD ₅₀ :	> 1,260 mg/kg; slightly toxic
Eye Irritation - rabbit (24-hr, exp):	corrosive
Skin Irritation - rabbit (24-hr, exp):	corrosive
DOT Skin Corrosion - rabbit (4-hr, exp):	corrosive

The results of single exposure tests indicate that this cleaner shows slight toxic orally and no more than slightly toxic after skin application. Following a 24-hour exposure irreversible eye and skin damage will occur. This acid cleaner has produced no genetic changes in standard tests using bacterial cells.

Additional Information

This material has a low vapor pressure at room temperature and is not expected to present a significant inhalation hazard under ambient conditions. However, it may be irritating the respiratory tract if inhaled as a mist or if the material is vaporized. The American Conference of Governmental Industrial Hygienists (ACGIH) has established a Threshold Limit Value (TLV).

Section 12 – Ecological information

Environmental toxicity The acid used in this cleaner acid is practically nontoxic to one species of freshwater fish. No toxicity data was located for other freshwater species, algae, or Daphnia magna in a search of the available scientific literature. The following data have been classified using the criteria adopted by the European Economic Community (EEC) for aquatic organism toxicity. 96-hr. LC₅₀ Mosquito fish: 138 mg/L, practically nontoxic

Environmental Fate No specific biodegradation test data was located in a search of the available scientific literature, was reported in the literature that while acidity of this material may be reduced readily in natural waters, the phosphate may persist indefinitely.

Section 13 –Disposal considerations

Disposal considerations This material when discarded is a hazardous waste as defined by the U.S. Resource Conservation and Recovery Act (RCRA), 40 CFR 261.22, due to its characteristic of corrosivity, EPA hazardous waste number D002. Best Demonstrated Available Treatment (BOAT) as defined by RCRA f D002 characteristic wastes is DEACTIVATION plus meet 40 CFR 268.48 (Universal Treatment Standards) for non-CWA/non-CWA equivalent/non-Class I SDWA systems. Dispose of accordance with local, state and federal regulations. Consult your attorney or appropriate regulate officials for information on such disposal.

Section 14 – Transportation information

Road/Rail, Sea and Air

IMDG/UN	UN 1805	Phosphoric acid, solution, 8, III
ICOA/IATA	UN 1805	Phosphoric acid, solution, 8, III
RID/ADR	UN 1805	Phosphoric acid, solution, 8, III
Canadian TDG	UN 1805	Phosphoric acid, solution, 8, III
US DOT	UN 1805	Phosphoric acid, solution, 8, III

*Reportable Quantity/ Reportable Limit (RQ/RL):

Canadian: Regulated limit (RL) for packages greater than or equal to 230 kg U.S. DOT: Reportable quantity (RQ) for packages greater than or equal to 5,000 lb

Section 15 – Regulatory information

15. REGULATORY INFORMATION

EC label

Hazard symbol:	Corrosive
R34	Causes burns
S26	In case of contact with eyes, rinse immediately with plenty of water & seek medical advice.
S36	Wear suitable protective clothing
S37	Wear suitable protective gloves
S39	Wear eye/face protection

Chemical Inventory

USA TSCA	Listed	Australia	Listed
Canada DSL	Listed	Korea	Listed
EC	Listed	Philippines	Listed
Japan	Listed	China	Listed

Additional information

WHMIS Classification:	D2 (B) - Materials Causing Other Toxic Effects
	E - Corrosive Material

SARA Hazard Notification

Hazard Categories Under Title III Rules (40 CFR 370):	Immediate
Section 302 Extremely Hazardous Substances:	Not Applicable
Section 313 Toxic Chemical(s):	Not Applicable

CERCLA Reportable Quantity: 5,000 lbs. of phosphoric acid

Release of 5,000 lbs. or more of this product into the environment in a 24-hour period requires notification to the U.S. National Response Center (800-424-8802 or 202-426-2675). Since local, state, and federal laws vary; consult your attorney or appropriate regulatory officials for information relating to spill reporting.

Section 15 – Regulatory information continued:

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulation and the MSDS contains all the information required by the Canadian Controlled Products Regulation.

Refer to Section 11 for OSHA/HPA Hazardous Chemical(s) and Section 13 for RCRA classification.

Section 16 – Other information

History
Date of issue/Date of revision: 7-17-2015
: 1Version: 1H-Health: 2Flammability: 0Physical Hazards : 0

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.