

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product Name: CHEM-SOLVE

Manufacturer and Supplier: CHEM CLEAN LTD

Address: #58-60 Century Drive
Trincity Industrial Estate
Macoya
Trinidad and Tobago

EMERGENCY TELEPHONE NUMBER (868) 223 2436

Recommended use: Multi-purpose Institutional Lime Solvent and Cleaner

Restriction on use: For industrial use only. Not to be used with alkaline, chlorine and peroxide containing products. For specific intended use guidance, please refer to the information provided on the package or Product Data Sheet.

2. HAZARDS IDENTIFICATION

GHS Classification

Skin corrosion: Category 1C

Serious eye damage: Category 1

GHS Label element

Hazard pictograms:



Signal Word: Danger

Hazard Statements: H290: May be corrosive to metals.
H302: Harmful if swallowed.
H314: Causes severe burns and eye damage.

Precautionary Statements: P102: Keep out of reach of children.
P103: Read label before use.

Prevention Precautionary Statements: P233: Keep container tightly closed.
P262: Do not get in eyes, on skin, or on clothing.
P264: Wash hands thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection.
P260: Do not breathe dust/fumes/gas/mist/vapours/spray.

Response Precautionary Statements: P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

Storage Precautionary Statements: P404: Store in a closed container.
P403+233: Store in a well ventilated place. Keep container tightly closed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS	CHEMICAL NAME	% CONCENTRATION
7664-38-2	Phosphoric Acid	28 - 32
127087-87-0	Nonylphenol ethoxylate	0.1 – 1.0

Any concentration shown as a range is to protect confidentiality.

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.

4. FIRST AID MEASURES

General Advice	<ul style="list-style-type: none"> ◆ In the case of accident or if you feel unwell, seek medical advice immediately. ◆ Show this Safety Data Sheet to the Doctor in attendance.
Skin Contact	<ul style="list-style-type: none"> ◆ Immediately flush skin with plenty of cool running water for at least 15 minutes. ◆ Immediately remove contaminated clothing. ◆ Wash contaminated clothing before reuse. ◆ Immediate medical attention is required if irritation persists or burns develop.
Eye Contact	<ul style="list-style-type: none"> ◆ Rinse cautiously with water for several minutes. ◆ Remove contact lens (if worn) and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. ◆ Immediate medical attention is required if symptoms persist.
Inhalation	<ul style="list-style-type: none"> ◆ If breathing is difficult, move victim to fresh air and keep at rest in a position comfortable for breathing. ◆ If not breathing, give artificial respiration. ◆ Medical attention is required if symptoms persist.
Ingestion	<ul style="list-style-type: none"> ◆ If swallowed, rinse mouth thoroughly. ◆ DO NOT induce vomiting. ◆ Immediate medical attention is required if symptoms persist.

5. FIRE-FIGHTING MEASURES

Flash Point	<ul style="list-style-type: none"> ◆ N/A
Suitable Extinguishing Media	<ul style="list-style-type: none"> ◆ Water – spray ◆ Alcohol-resistant foam ◆ Dry chemical or carbon dioxide
Extinguishing media which must not be used for safety reasons	<ul style="list-style-type: none"> ◆ N/A
Specific Hazards	<ul style="list-style-type: none"> ◆ Cool exposed containers with water spray to prevent pressure build-up. ◆ Must wear NIOSH approved self-contained breathing apparatus and protective clothing. ◆ To minimize gas generation, flood burning material with large quantities of water.
Special exposure hazards arising from the substance, or preparation itself, its combustion products or released gases	<ul style="list-style-type: none"> ◆ Material is corrosive. ◆ Can react with soft metals such as Aluminum or Zinc generating hydrogen gas which is flammable and/or combustible in the presence of an ignition source.
Special Protective Equipment for fire-fighters	<ul style="list-style-type: none"> ◆ As in any fire, wear NIOSH approved self-contained breathing apparatus and full protective gear.

Specific Methods	<ul style="list-style-type: none"> ◆ Cool containers / Tanks with water spray. ◆ Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
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6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	<ul style="list-style-type: none"> ◆ Do not inhale mist, do not in eyes or skin, do not swallow. ◆ Ensure adequate ventilation. ◆ Use personal protective equipment. ◆ Wash thoroughly after handling.
Environmental Precautions	<ul style="list-style-type: none"> ◆ Discharge in accordance with Government Regulations ◆ Do not discharge into lakes, stream, ponds or public water.
Methods for cleaning up	<ul style="list-style-type: none"> ◆ Small spills: Neutralize with mild alkaline solution then wash down with large quantities of water in sanitary sewer ◆ Large spills: Dike to prevent runoff. Reclaim as much as possible. Absorb remainder with inert material (sand or vermiculite) and place in compatible container for disposal. Flush residue with large amounts of water into sanitary sewer. ◆ Cleaning up personnel should wear appropriate protective equipment

7. HANDLING AND STORAGE

Handling

Technical Measures/Precautions	<ul style="list-style-type: none"> ◆ Avoid contact with skin, eyes and clothing. ◆ Do not get in eyes or on skin, do not swallow. ◆ Ensure adequate ventilation. ◆ KEEP OUT OF REACH OF CHILDREN.
Safe Handling Advice	<ul style="list-style-type: none"> ◆ Wash hands immediately after contact to avoid hand-eye transfer

Storage

Technical Measures/Precautions	<ul style="list-style-type: none"> ◆ Keep containers tightly closed in a cool, dry area. ◆ Store in properly labeled containers ◆ Do not contaminate water, food or feed ◆ Do not reuse empty containers – they may contain residues ◆ Do not mix with anything but water
Incompatible Products	<ul style="list-style-type: none"> ◆ Do not mix with alkaline or chlorine containing cleaners, peroxides or reducing agents ◆ Avoid contact with aluminum, zinc, other soft metal or galvanized metal, or other metals except as directed on label

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

<u>Engineering Measures</u>	<ul style="list-style-type: none"> ◆ The use of local exhaust ventilation is not normally required.
<u>Personal Protective Equipment</u>	
Hand Protection	<ul style="list-style-type: none"> ◆ Neoprene or rubber gloves with cuffs
Eye Protection	<ul style="list-style-type: none"> ◆ Tightly fitting chemical splash goggles. ◆ For continued or severe exposure wear a face shield over goggles. ◆ Safety eyebath nearby.
Respiratory Protection	<ul style="list-style-type: none"> ◆ None, if used in adequately ventilated area. ◆ In case of insufficient ventilation, wear NIOSH approved acid respiratory equipment.
Skin and Body Protection	<ul style="list-style-type: none"> ◆ Use chemical protective clothing for repeated or prolonged contact. ◆ Coveralls, apron, gloves, rubber boots should be worn. ◆ Suitable facilities for quick drenching or flushing should be provided within the work area for immediate emergency use.
Hygiene Measures	<ul style="list-style-type: none"> ◆ Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. ◆ Wear suitable gloves and eye/face protection. ◆ Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

Physical State	Liquid
Color	Green
Odor	Pungent

Important Health Safety and Environmental Information

Molecular Wt.	N/A
pH (1% solution)	2.0 – 3.0
Boiling pt	N/A
Specific gravity	1.14 – 1.18
Viscosity (CSTS)	Not specified
Solubility in water	100%
Vapor Pressure	N/A
Vapor Density (AIR=1)	N/A
Evaporation Rate (WATER:1)	N/A
Freezing Point	N/A
Volatile Organic Compounds (Total VOC's)	N/A

10. STABILITY AND REACTIVITY

Stability	◆ Stable under normal conditions
Conditions to avoid	
Materials to avoid	<ul style="list-style-type: none"> ◆ Alkaline cleaners ◆ Chlorine containing cleaners ◆ Peroxides ◆ Reducing agents ◆ Aluminum or galvanized surfaces or other metals
Hazardous Decomposition Products	◆ Phosphorus oxides
Polymerization	◆ Will not occur

11. TOXICOLOGICAL INFORMATION

Product Information

LD50/oral/rat	
<u>Local effects</u>	
Skin irritation	Can cause severe irritation Prolonged contact causes severe burns which may not be easily painful or visible
Eye irritation	
Sensitization	Skin sensitizer
<u>Specific effects</u>	Can cause serious damage to tissues if ingested
Carcinogenic Effects	None
Mutagenic Effects	Not determined
Reproductive toxicity	Not determined
Target Organ Effects	Mucous membranes of mouth, throat and digestive tract

12. ECOLOGICAL INFORMATION

Product information

Aquatic Toxicity: Do not discharge into lakes, streams, ponds or public waterways unless in accordance with Government Regulations.

Other Information

13. DISPOSAL CONSIDERATIONS

Waste from residues/Unused products	Do not discharge into lakes, streams, ponds or public waterways unless in accordance with Government Regulations. Consult the Environmental Protection Agency before disposing of any chemicals. Refer to the Environmental Management Authority (EMA) for complete waste disposal regulations on corrosive material
Contaminated Packaging	Empty containers should be taken for recycling, recovery or waste disposal

Further Information

14. TRANSPORT INFORMATION

Domestic (Land, D.O.T.)

UN Number: 3264
 UN Proper Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
 (Phosphoric Acid)
 Hazard label: 8
 Packing Group: II

International (IMDG, I.M.O.)

UN Number: 3264
 UN Proper Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
 (Phosphoric Acid)
 Transport Hazard Class: 8
 Packing Group: II
 Marine pollutant: No
 Limited Quantities: 1L
 Packing Instructions: P001
 IBC Instructions: IBC02
 EmS: F-A, S-B
 Stowage and segregation: Category B



Air transport (IATA)

UN Number: 3264
 UN Proper Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
 (Phosphoric Acid)
 Hazard Class: 8
 Packaging Group: II
 Limited Quantities: 0.5L

15. REGULATORY INFORMATION

OSHA: This product is classified as corrosive by definition of Hazard Communication Standard (29 CFR 1910.1200)

16. OTHER INFORMATION

Other

The information in the Safety Data Sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty,

express or implied, with respect to such information, we assume no liability resulting from use of SDS information.

End of Safety data sheet