1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

Product name: KOCHKLEEN® P-11
Product Use Description: Cleaning Agent

Manufacturer/Importer/Supplier/Distributor Information
Company Name: John R Hess & Company, Inc.
Address: 400 Station St
Cranston, RI 02910
USA
Telephone: (401) 785-9300 (800) 556-4377
E-mail: custerv@jrhess.com

Emergency Phone Numbers
Chemtrec 1-800-424-9300 (Spill, Leak, Fire, Exposure, Accident)
+1 (703) 527-3887 (outside USA)

2 HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Serious Eye Damage: Category 1
Skin Corrosion: Category 1B

Label elements
Pictogram

Signal Word: Danger

HAZARD STATEMENTS
H314 – Causes severe skin burns and eye damage.

PRECAUTIONARY STATEMENTS
P260 – Do not breathe dust or mist.
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P270 – Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331- IF SWALLOWED: rinse mouth. Do not induce vomiting.
P310 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor / physician if you feel unwell.
P303 + P361 + P353- IF ON SKIN (or hair): Remove / take off immediately all contaminated
clothing. Rinse skin with water/shower.
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position
Comfortable for breathing.
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 advice/attention.
P363 – Wash contaminated clothing before reuse.
P405 – Store locked up.

OTHER HAZARDS

HEALTH HAZARDS
MAY BE CORROSIVE TO THE SKIN, EYES AND RESPIRATORY
TRACT MAY CAUSE EYE DAMAGE
MAY BE HARMFUL OR FATAL IF SWALLOWED
**SEE "TOXICOLOGICAL INFORMATION" (SECTION 11) FOR MORE INFORMATION

POTENTIAL HEALTH EFFECTS, SKIN
Skin contact with wet material may be CORROSIVE. Short term contact may result in tissue destruction
and severe burns.

Repeated or prolonged contact may result in drying, reddening, itching, pain, inflammation, cracking and
possible secondary infection with tissue damage.

POTENTIAL HEALTH EFFECTS, EYE
CORROSIVE. Exposure may cause severe burns, destruction of eye tissue and possible permanent injury
or blindness.

POTENTIAL HEALTH EFFECTS, INHALATION
EXTREMELY IRRITATING AND CORROSIVE. May cause severe burns and tissue damage to the
respiratory tract. Symptoms may include throat burns, constriction of the windpipe (bronchospasms),
severe pulmonary edema and death, depending on the concentration and duration of exposure.

POTENTIAL HEALTH EFFECTS, INGESTION
May cause painful irritation and burning of the mouth and throat, painful swallowing, labored breathing,
burns or perforation of the gastrointestinal tract leading to ulceration and secondary infection. Corrosive
damage to the stomach and esophagus may be delayed.

3 COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS Number</th>
<th>Concentration*</th>
<th>Exposure Limits</th>
<th>Health Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM PHOSPHATE</td>
<td>7601-54-9</td>
<td>30 - 60 %</td>
<td>ND</td>
<td></td>
</tr>
<tr>
<td>ALKALI SALTS OF PHOSPHATES</td>
<td>PROPRIETARY</td>
<td>30 - 60 %</td>
<td>ND</td>
<td></td>
</tr>
<tr>
<td>TETRASODIUM PYROPHOSPHATE</td>
<td>7722-88-5</td>
<td>0.1 - 1 %</td>
<td>5 mg/m^3 8-Hour TWA (ACGIH)</td>
<td></td>
</tr>
<tr>
<td>TETRASODIUM PYROPHOSPHATE</td>
<td>7722-88-5</td>
<td>1 - 3 %</td>
<td>5 mg/m^3 8-Hour TWA (ACGIH)</td>
<td></td>
</tr>
</tbody>
</table>

Values do not reflect absolute minimums and maximums; these values are typical which may vary from time to time.
The specific identities of some of the components of this product are being withheld as trade secrets.
However, all pertinent hazards are addressed in this MSDS.
Alkali salts of phosphates do not meet the hazard criteria under OSHA or Canadian WHMIS.

WHMIS Classification: E

4 FIRST AID MEASURES

SKIN
Immediately flush skin with plenty of water, for at least 15 minutes, while removing contaminated clothing and shoes. GET IMMEDIATE MEDICAL ATTENTION.

Place contaminated clothing in closed container for storage until laundered or discarded. If clothing is to be laundered, inform person performing operation of contaminant's hazardous properties. Discard contaminated leather goods.

EYE
Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. GET IMMEDIATE MEDICAL ATTENTION.

INHALATION
Remove to fresh air. If not breathing, institute rescue breathing. If breathing is difficult, ensure airway is clear and give oxygen.

Keep affected person warm and at rest. GET IMMEDIATE MEDICAL ATTENTION.

INGESTION
Keep affected person warm and at rest. GET IMMEDIATE MEDICAL ATTENTION.

Never give anything by mouth to an unconscious person. Do not induce vomiting because of danger of aspirating liquid into lungs, causing serious damage and chemical pneumonitis.

Have victim rinse mouth thoroughly with water, then drink 2 to 8 oz. (60 to 240 ml) of water. If vomiting occurs naturally, have the victim lean forward to reduce risk of aspiration. Repeat administration of water. Quickly transport to emergency care facility.

NOTES TO PHYSICIAN
This product is primarily an irritant and corrosive. As a corrosive, give attention to potential complication of esophagus or stomach perforations if ingested. Use of emetics and lavage are contraindicated. Necrosis and associated inflammatory processes peak at about 48 hours, but may extend up to four days. Initial healing processes occur during the period 4 to 14 days, but the esophageal wall is weakest during this period.

If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

5 FIRE FIGHTING MEASURES

HAZARDOUS COMBUSTION PRODUCTS
Combustion may produce COx, POx, phosphine.

EXTINGUISHING MEDIA
Material itself will not burn.

BASIC FIRE FIGHTING PROCEDURES
Evacuate area and fight fire from a safe distance.
Use extinguishing agent suitable for type of surrounding fire. Use water spray to cool adjacent structures and to protect personnel. Shut off source of flow if possible.

Firefighters must wear MSHA/NIOSH approved positive pressure breathing apparatus (SCBA) with full face mask and full protective equipment.

UNUSUAL FIRE & EXPLOSION HAZARDS
None known.

Flash Point NA (WATER BASE)
Autoignition Temperature ND
Flammability Limits in Air, Lower, % by Volume ND
Flammability Limits in Air, Upper, % by Volume ND

6 ACCIDENTAL RELEASE MEASURES

EMERGENCY ACTION
Keep unnecessary people away. Isolate spill area and keep unnecessary people away.

Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation. Use personal protective equipment.

Environmental precautions
If product is released to the environment, take immediate steps to stop and contain release. Caution should be exercised regarding personnel safety and exposure to the released product. Notify local, provincial and/or federal authorities, if required.

Methods and material for containment and cleaning up
Collect spillage and collect in suitable container for disposal.

Reference to other sections
Refer to protective measures listed in Sections 8 and 13.

SPILL OR LEAK PROCEDURE
Large spills may be neutralized with dilute alkaline solutions of soda ash or lime. Stop leak when safe to do so. Do not touch or walk through spilled material.

7 HANDLING & STORAGE

HANDLING
This material should be stored and shipped in plastic or plastic lined containers. Do not use with materials or equipment sensitive to acidic solutions.

Do not eat, drink or smoke in areas of use or storage.

STORAGE
Avoid contact with strong oxidizers, bases, and metals. Store in tightly closed containers in cool, dry area away from heat and incompatibles.

Empty containers may contain product residue. Do not reuse without adequate precautions.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS
General or local exhaust ventilation and other forms of engineering controls are the preferred means for controlling exposures.
EYE PROTECTION: PERSONAL PROTECTION EQUIPMENT (PPE)
Wear chemical safety goggles and face shield. Have eye washing facilities readily available where eye contact can occur.

SKIN PROTECTION: PERSONAL PROTECTION EQUIPMENT (PPE)
Avoid skin contact with this material. If skin contact is anticipated, protective clothing, including impervious gloves, should be worn. Protective glove materials include, but are not limited to natural rubber, neoprene or nitrile.

Additional protection may be necessary to prevent skin contact including use of apron, arm covers, face shield, or boots. Provide safety showers at any location where skin contact can occur.

Use good personal hygiene.

RESPIRATORY PROTECTION: PERSONAL PROTECTION EQUIPMENT (PPE)
A NIOSH/MSHA approved air purifying respirator with an acid vapor cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

9 PHYSICAL & CHEMICAL PROPERTIES

ODOR AND APPEARANCE
ODORLESS FREE FLOWING WHITE GRANULES.
Boiling Point NA
Specific Gravity ND
Melting Point ND
Percent Volatile NA
Vapor Pressure NA
Vapor Density NA
Bulk Density ND
Solubility in Water Complete
Octanol/Water Partition ND
Volatile Organic ND
Pour Point NA
pH Value > 10.5 @ 1% soln.
Freezing Point NA
Viscosity NA
Evaporation Rate NA
Molecular Formula NA
Molecular Weight NA
Chemical Family NA
Odor Threshold ND

10 STABILITY & REACTIVITY

STABILITY/INCOMPATIBILITY
Incompatible with acids and metals. See precautions under Handling & Storage (Section 7).

HAZARDOUS REACTIONS/DECOMPOSITION PRODUCTS
Decomposes to form irritating and toxic vapors, oxides of phosphorus, oxides of sodium.
11 TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE
Inhalation, ingestion, skin and eye contact.

LD50
LD50: Sodium phosphate Rat Oral 7.4 g/kg

TOXICOLOGICAL DATA
Acute or chronic overexposure to this material or its components may cause systemic toxicity, including adverse effects to the following: bone and kidney.

Exposure to components of this material may cause the following specific symptoms, depending on the concentration and duration of exposure: severe gastroenteritis, shock-like state with hypotension and cyanosis and tetany from hypocalcemia. Other symptoms of exposure may include the following: urinary changes and inflammation of the jawbone.

TERATOGENICITY, MUTAGENICITY, OTHER REPRODUCTIVE EFFECTS
Insufficient evidence.

PRE-EXISTING CONDITIONS AGGRAVATED BY EXPOSURE
Pre-existing medical conditions which may be aggravated by exposure include disorders of the skin, eyes, kidney and respiratory tract.

12 ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION
Not toxic to aquatic organisms and not suspected of long-term adverse effects in the aquatic environment.

DISPOSAL CONSIDERATIONS
WASTE DISPOSAL
This product, as supplied, when discarded or disposed of, is a hazardous waste according to Federal regulations (40 CFR 261) due to its corrosivity. Under the Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user of the product to determine, at the time of disposal, whether the material is a hazardous waste subject to RCRA.

The transportation, storage, treatment and disposal of RCRA waste material must be conducted in compliance with 40 CFR 262, 263, 264, 268 and 270. Disposal can occur only in properly permitted facilities. Check state and local regulations for any additional requirements as these may be more restrictive than federal laws and regulations. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Disposal of this material must be conducted in compliance with all federal, state and local regulations.

In Canada, wastes should be disposed of according to federal, state, provincial and local regulations.

13 TRANSPORT INFORMATION

BILL OF LADING - BULK (U. S. DOT)
Corrosive Solid, Basic, Organic, N.O.S. (sodium phosphate), 8, UN 3263, PG III

BILL OF LADING - NON-BULK (U. S. DOT)
Corrosive Solid, Basic, Organic, N.O.S. (sodium phosphate), 8, UN 3263, PG III
The above description may not cover shipping in all cases, please consult 49 CFR 172.101 for specific
shipping information.

**14 REGULATORY INFORMATION**

**FEDERAL REGULATIONS**

All components of this product are listed on the TSCA Inventory.

This material, as supplied, contains trisodium phosphate (CAS#7601-54-9) a Hazardous Substance as per 40 CFR Part 302.4. The reportable quantity for trisodium phosphate is 5,000 pound(s). Any release of this material that results in a release of trisodium phosphate equal to or exceeding the reportable quantity must be reported to the National Response Center (800-424-8802) and appropriate state and local regulatory agencies as described in 40 CFR Part 302.6 and 40 CFR 355.40, respectively.

Check state and local regulations for any additional requirements as these may be more restrictive than federal laws and regulations. Failure to report may result in substantial civil and criminal penalties.

This product does not contain toxic chemicals (in excess of the applicable de minimis concentration) that are subject to the annual toxic chemical release reporting requirements of the Superfund Amendments and Reauthorization Act (SARA) Section 313 (40 CFR 372).

This product contains one or more components designated as hazardous substances or toxic pollutants pursuant to the Federal Clean Water Act (40 CFR 116.4 Table A; 40 CFR 401.15). Any unpermitted introduction of this product into a facility storm water or wastewater discharge may constitute a violation of the Clean Water Act. Facilities must notify the appropriate permitting agency prior to introducing this product into the aforementioned discharges.

There may be specific regulations at the local, regional or state/provincial level that pertain to this product.

**SARA TITLE III RATINGS**

Immediate Hazard: X Delayed Hazard: X Fire Hazard: X Pressure Hazard: X Reactivity Hazard:

**STATE REGULATION**

Based on available information this product does not contain any components or chemicals currently known to the State of California to cause cancer, birth defects or reproductive harm at levels which would be subject to Proposition 65. Reformulation, use or processing of this product may affect its composition and require re-evaluation.

**INTERNATIONAL REGULATIONS**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and this MSDS contains all the information required by the CPR.

**WHMIS Classification:** D2B, E.

All known major components of this product are listed on the Canadian DSL.

**WHMIS RATINGS**

- Compressed Gas
- Flammable/Combustible
- Oxidizer
- Acutely Toxic
- Other Toxic Effects
- Bio Hazardous
- Corrosive
- Dangerously Reactive
16 OTHER INFORMATION

Hazardous Material Information System (U.S.A.)

<table>
<thead>
<tr>
<th>Health</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>0</td>
</tr>
<tr>
<td>Physical hazards</td>
<td>0</td>
</tr>
</tbody>
</table>

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

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Prepared By: HSE Department
Issue Date: 06/10/2017
Version: 2
Precedes: 05/14/2015

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