1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier
Product Name KOCHKLEEN® 440

Other means of identification
Product Code PROD-313
UN/ID no. UN1479

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
OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Acute toxicity - Oral</th>
<th>Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
</tr>
<tr>
<td>Oxidizing solids</td>
<td>Category 3</td>
</tr>
</tbody>
</table>

Label elements
Danger

Emergency Overview

Hazard statements
May intensify fire; oxidizer
Harmful if swallowed
Causes serious eye damage

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Physical state</th>
<th>Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td>White granular</td>
<td>powder</td>
<td>Bland</td>
</tr>
</tbody>
</table>

Precautionary Statements - Prevention
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep/Store away from clothing/ combustible materials
Take any precaution to avoid mixing with combustibles.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary Statements - Response
If swallowed: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.
If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician

Hazards not otherwise classified (HNOC)
Not applicable

Other Information
Harmful to aquatic life. Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substance</th>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM PERCARBONATE</td>
<td>15630-89-4</td>
<td>60 - 100</td>
<td>*</td>
<td></td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

Eye contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. In the case of difficulty of opening the eyelids, administer an analgesic eye wash (oxybuprocaine).

Skin contact
Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

Inhalation
Remove victim to fresh air or supply oxygen. Administer artificial respiration if victim is unconscious. Seek medical attention if victim is unconscious. Seek medical attention if victim is overcome by vapors or breathing difficulty persists.

Ingestion
Do NOT induce vomiting. Rinse mouth. Immediate medical attention is required. Oxygen or artificial respiration if needed.

Most important symptoms and effects, both acute and delayed

Symptoms
Prolonged skin contact may cause skin irritation.

Indication of any immediate medical attention and special treatment needed

Note to physicians
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Water. Water spray (fog).

Unsuitable extinguishing media
None.

Specific hazards arising from the chemical
Material is an oxidizer. May ignite combustibles (wood paper, oil, clothing, etc.). Contact with flammables may cause fire or explosions. Risk of explosion if heated under confinement. Oxygen released in thermal decomposition may support combustion.

Hazardous combustion products
Oxygen.

Explosion data
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions
Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas.

Environmental precautions
See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment
For small spills: Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. Use appropriate PPE. See Section 8. For large spills: Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. Use appropriate PPE. See Section 8. In case of contact with water, prevent runoff from entering into storm sewers and ditches which lead to natural waterways. Never return spills to original containers for re-use.

Methods for cleaning up
Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Avoid generation of dust. Use personal protection recommended in Section 8. Use only in well-ventilated areas. Keep container closed when not in use. Store at room temperature in well ventilated areas. Prevent product from freezing. Follow SDS and label warnings even after package is empty. Do not cut, puncture, or weld empty container. Not for use in pressure washing equipment. Product applications which generate dust, mist, or fumes may require exposure limit modification. Use personal protection recommended in Section 8.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place.

Packaging materials

Incompatible materials
None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Appropriate engineering controls

Engineering Controls
Showers. Eyewash stations. Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles).

Skin and body protection
Wear protective gloves and protective clothing.

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice.
9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance (physical state, color, etc.)</td>
<td>Powder, white granular</td>
</tr>
<tr>
<td>Odor</td>
<td>Bland</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No Information Available</td>
</tr>
<tr>
<td>pH</td>
<td>No Information Available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No Information Available</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>No Information Available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No Information Available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No Information Available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No Information Available</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limit</td>
<td>Not Explosive</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No Information Available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No Information Available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No Information Available</td>
</tr>
<tr>
<td>Water solubility</td>
<td>No Information Available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No Information Available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No Information Available</td>
</tr>
<tr>
<td>Kinetic viscosity</td>
<td>No Information Available</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No Information Available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No Information Available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>May intensify fire</td>
</tr>
</tbody>
</table>

Other Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Softening point</td>
<td>No Information Available</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No Information Available</td>
</tr>
<tr>
<td>VOC content %</td>
<td>No Information Available</td>
</tr>
<tr>
<td>Bulk density</td>
<td>No Information Available</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity

Decomposes when moist.
Decomposes on heating.
Potential for exothermic reaction.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Contact with flammables may cause fire or explosions. Contact with combustible material may cause fire.

Conditions to avoid

To avoid thermal decomposition, do not overheat. Exposure to moisture.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

Oxygen.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

<table>
<thead>
<tr>
<th>Route</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Information</td>
<td>No data available</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Avoid breathing dust.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>Risk of serious damage to eyes.</td>
</tr>
</tbody>
</table>
Skin contact  May cause irritation.

Ingestion  Harmful if swallowed.

Component Information  Caution - substance not yet tested completely

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM PERCARBONATE</td>
<td>= 1034 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>15630-89-4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Information on toxicological effects

Symptoms  No Information Available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization  No Information Available.

Germ cell mutagenicity  No Information Available.

Carcinogenicity  No Information Available.

Reproductive toxicity  No Information Available.

STOT - single exposure  No Information Available.

STOT - repeated exposure  No Information Available.

Aspiration hazard  No Information Available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM PERCARBONATE</td>
<td>70: 240 h Chlorella emersonii mg/L EC50</td>
<td>70.7: 96 h Pimephales promelas mg/L LC50 static</td>
<td>4.9: 48 h Daphnia pulex mg/L EC50</td>
</tr>
<tr>
<td>TAED</td>
<td>-</td>
<td>500: 96 h Brachydanio rerio mg/L LC50 static</td>
<td>800: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>10543-57-4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Persistence and degradability  No Information Available.

Bioaccumulation  No Information Available.

Other adverse effects  No Information Available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes  Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging  Do not reuse container.

14. TRANSPORT INFORMATION

DOT
UN/ID no.  UN1479
Proper shipping name  Oxidizing solid, n.o.s.
Hazard Class  5.1
Packing Group  III
Special Provisions  62, IB8, IP3, T1, TP33
Description  UN1479, Oxidizing solid, n.o.s. (SODIUM PERCARBONATE), 5.1, III
Emergency Response Guide Number  140

California Hazardous Waste Status

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM PERCARBONATE</td>
<td>Ignitable</td>
</tr>
<tr>
<td>Mode</td>
<td>UN/ID no.</td>
</tr>
<tr>
<td>------------</td>
<td>-----------</td>
</tr>
<tr>
<td>TDG</td>
<td>UN1479</td>
</tr>
<tr>
<td>MEX</td>
<td>UN1479</td>
</tr>
<tr>
<td>ICAO (air)</td>
<td>UN1479</td>
</tr>
<tr>
<td>IATA</td>
<td>UN1479</td>
</tr>
<tr>
<td>IMDG</td>
<td>UN1479</td>
</tr>
<tr>
<td>RID</td>
<td>UN1479</td>
</tr>
<tr>
<td>ADR</td>
<td>UN1479</td>
</tr>
<tr>
<td>ADN</td>
<td>UN1479</td>
</tr>
</tbody>
</table>
Special Provisions  274
Description  UN1479, Oxidizing solid, n.o.s. (SODIUM PERCARBONATE), 5.1, III
Hazard label(s)  5.1
Limited quantity (LQ)  5 kg

15. REGULATORY INFORMATION

International Inventories
   TSCA  Complies
   DSL/ELINCS  Complies
   ENCS  Complies
   IECSC  Complies
   KECL  Complies
   PICCS  Complies
   AICS  Complies

Legend:
   TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
   DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
   EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
   ENCS - Japan Existing and New Chemical Substances
   IECSC - China Inventory of Existing Chemical Substances
   KECL - Korean Existing and Evaluated Chemical Substances
   PICCS - Philippines Inventory of Chemicals and Chemical Substances
   AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories
   Acute health hazard  No
   Chronic Health Hazard  No
   Fire Hazard  Yes
   Sudden release of pressure hazard  No
   Reactive Hazard  No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

U.S. EPA Label Information
EPA Pesticide Registration Number  Not applicable
16. OTHER INFORMATION

Hazardous Material Information System (U.S.A)

<table>
<thead>
<tr>
<th>Health</th>
<th>* 2</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:    6/12/2017
Version:    2
Precedes:  6/24/2015

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