



John R Hess & Company, Inc.

KOCHKLEEN® 180

Section 1. Identification

Product Identifier	KOCHKLEEN® 180
General Use	Specialty Cleaners – Industrial application
Physical Description	Liquid
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)

Section 2. Hazards Identification

OSHA/HCS status	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

GHS label elements

Hazard pictograms



Signal word

Danger

Hazard statements

Causes severe skin burns and eye damage.
May cause respiratory irritation.

Precautionary statements

Prevention	Wear protective gloves. Wear eye or face protection. Wear protective clothing. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling.
Response	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. 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 physician.
Storage	Store locked up.
Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	Not known.

Section 3. Composition/information on ingredients

Substance / Mixture	Mixture
Other means of identification	Not Available

CAS number/other identifiers

CAS number	Not applicable.
Product code	70

Ingredient name	Other names	%	CAS number
Lactic acid	Lactic acid	10-30	50-21-5
Citric acid	Citric acid	10-30	77-92-9
Benzenesulfonic acid, C10-16-alkyl derivs	Benzenesulfonic acid, C10-16-alkyl derivs	5-10	68584-22-5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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 and hence require reporting in this section.

Section 4. First aid measures**Description of necessary first aid measures**

Eye contact	Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly
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Inhalation	<p>by a physician.</p> <p>Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.</p>
Skin contact	<p>Get medical attention immediately. Call a poison center or physician. Wash contaminated skin with soap and plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.</p>
Ingestion	<p>Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.</p>

Most important symptoms/effects acute and delayed

Potential acute health effects

Eye contact	Causes serious eye damage
Inhalation	May cause respiratory irritation.
Skin contact	Causes severe burns.
Ingestion	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	Adverse symptoms may include the following: pain watering redness
Inhalation	Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	Adverse symptoms may include the following:

stomach pains

Indication of immediate medical attention and special treatment needed if necessary

Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	No specific treatment.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

SECTION 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire. Use dry chemical, CO ₂ , alcohol-resistant foam or water spray (fog).
Unsuitable extinguishing media	Do not use water jet.
Specific hazards arising from the chemical	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides
Special protective actions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble,
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absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and Storage

Precautions for safe handling

Protective measures Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage including any incompatibilities Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Separate from alkalis. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure Controls/Personal Protection

Control parameters

Occupational exposure limit values

None

Appropriate engineering controls

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any

Environmental exposure controls

recommended or statutory limits.

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection:
Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

Personal protective equipment for

Other Skin protection

Respiratory protection

the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and Chemical Properties

Appearance	Liquid (clear)
Color	Yellow (light)
Odor	Odorless
Odor Threshold	0.75 mg/m ³ (Nitric acid)
pH	<2
Melting point	<0°C (<32°F)
Boiling point	100°C (212°F)
Flash point	Not available
Evaporation rate	Not available
Lower & Upper explosion limits (flammable)	Not available
Vapor pressure	Not available
Vapor density	Similar to water
Relative density	Not available ^l
Solubility	Easily soluble in the following materials: cold water and hot water.
Water solubility	Not available
Partition coefficient: n- octanol/water	Not available
Autoignition temperature	Not available
Decomposition temperature	Not available
SADT	Not available
Viscosity	Not available
Physical/chemical properties comments	Solution/Anionic

Section 10. Stability and Reactivity

Reactivity	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	The product is stable.
Possibility of hazardous Reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid Incompatible materials	No specific data Reactive or incompatible with the following materials: oxidizing materials Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air. Reactive or incompatible with the following materials: alkalis
Hazardous decomposition Products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological Information**Information on toxicological effects****Acute toxicity**

Product/ingredient	Result	Species	Dose	Exposure
disodium decyl (sulphonatophenoxy) benzenesulphonate	LD50 Oral	Rat	1420 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Dose	Exposure
lactic acid citric acid Benzenesulfonic acid, C10-16-alkyl derivs	LD50 Oral	Rat	3543 mg/kg	
	LD50 Oral	Rat	3 g/kg	
	LD50 Dermal	Rabbit	2000 mg/kg	
	LD50 Oral	Rat	775 mg/kg	

lactic acid	Eyes - Severe irritant	Rabbit		750 mcg -24 hr
	Skin - Moderate irritant	Rabbit		100 mg -24 hr
	Skin - Severe irritant	Rabbit	-	5 mg 88% 24 hrs
citric acid	Eyes - Severe irritant	Rabbit		750 mcg-24 hrs
	Skin - Mild irritant	Rabbit		500 mg
	Skin - Moderate irritant	Rabbit		0.5 Milliliters

Sensitization

Not available

Mutagenicity

Not available

Carcinogenicity

Not available

Reproductive toxicity

Not available

Teratogenicity

Not available

STOT-single exposure

Name	Category	Route of exposure	Target organs
Lactic acid	Category 3	Not applicable.	Respiratory tract irritation
Citric acid	Category 3	Not applicable.	Respiratory tract irritation

STOT-repeated exposure

Not available

Aspiration hazard

Not available

Information on likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact

Causes serious eye damage

Inhalation

May cause respiratory irritation.

Skin contact

Adverse symptoms may include the following:
pain or irritation
redness

Ingestion

blistering may occur

Severely corrosive to the digestive tract. Causes severe burns.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	Adverse symptoms may include the following: pain watering redness
Inhalation	No specific data.
Skin contact	Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	Adverse symptoms may include the following: stomach pains

Delayed and immediate effects and chronic effects from short and long term exposure**Short term exposure**

Potential immediate effects	Not available
Potential delayed effects	Not available

Long term effects

Potential immediate effects	Not available
Potential delayed effects	Not available

Potential chronic health effects

General	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates:

Route	ATE value
Oral	5870.3 mg/kg
Dermal	28571.4 mg/kg

Section 12. Ecological Information**Toxicity**

Product/ingredient name	Result	Species	Exposure
Lactic acid	Acute LC50 257.73 mg/l Fresh water	Fish - Oreochromis mossambicus- Adult	96 hours
Citric acid	Acute LC50 160000 µg/l Marine water	Crustaceans - Carcinus maenas - Adult	48 hours
Benzenesulfonic acid, C10-16-alkyl derivs.	Acute EC50 5.65 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia – Neonate	48 hours

Persistence and degradability

Not available

Bio accumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
lactic acid	-0.72	-	low
citric acid	-1.8	-	low
Benzenesulfonic acid, C10-16-alkyl derivs.	3.8	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc})
Not available





Other adverse effects

Not available

Section 13. Disposal Considerations

Disposal methods The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport Information

	DOT Classification		IMDG	IATA
UN number	UN3265		UN3265	UN3265
UN proper shipping name	Corrosive liquid, acidic, organic, n.o.s. (lactic acid, Benzenesulfonic acid, C10-16-alkyl derivs.)		CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (lactic acid Benzenesulfonic acid, C10-16-alkyl derivs.)	Corrosive liquid, acidic, organic, n.o.s. (lactic acid, Benzenesulfonic acid, C10-16-alkyl derivs.)
Transport hazard class(es)	8 	8 	8 	8 
Packing group	II		II	II
Environmental hazards	No.		No.	No.

Additional information	Limited quantity Yes Packaging instruction Passenger aircraft Quantity limitation: 1 L Cargo aircraft Quantity limitation: 30 L Special Provisions B2, IB2, T11, TP2, TP27	Emergency schedules F-A, S-B Special Provisions 274	Passenger and Cargo Aircraft Quantity limitation: 1 L Packaging instructions: 851 Cargo Aircraft Only Quantity limitation: 30 L Packaging instructions: 855 Limited Quantities-Passenger Aircraft Quantity limitation: 0.5 L Packaging instructions: Y840 Special provisions A3, A803
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Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not available.

Section 15. Regulatory Information

U.S. Federal regulations	United States inventory (TSCA 8b): All components are listed or exempted.
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	Not listed
Clean Air Act Section 602 Class I Substances	Not listed
Clean Air Act Section 602 Class II Substances	Not listed
DEA List I Chemicals (Precursor Chemicals)	Not listed
DEA List II Chemicals (Essential Chemicals)	Not listed
SARA302/304	
Composition/information on ingredients	No products were found.
SARA 304 RQ	Not applicable.
SARA311/312	
Classification	Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard

lactic acid	10-30	No.	No.	No.	Yes.	No
citric acid	10-30	Yes.	No.	No.	Yes.	No
Benzenesulfonic acid, C10-16-alkyl derivs.	5-10	No.	No.	No.	Yes.	No

SARA 313

Not applicable

State Regulations

Massachusetts
New York
New Jersey
Pennsylvania
California Prop65

None of the components are listed
None of the components are listed
None of the components are listed
None of the components are listed
None of the components are listed

Section 16. Other Information**Hazardous Material Information (USA)**

Health	*	3
Flammability		0
Physical hazards		0

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 (USA)

Health		Flammability
		Instability/Reactivity
		Special

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Revision Date	04/26/2017
Issue Date	05/14/2015
Version	2

Key to abbreviations

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

References

HCS (U.S.A.)- Hazard Communication Standard
International transport regulations

Disclaimer

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