SAFETY DATA SHEET

Print date: **Revision Date:** 03/27/2015 **Revision Number:** 1

1. COMPANY AND PRODUCT IDENTIFICATION

Product identifier

Product Name: KEMIKO® ACID STAIN
Product code: 37P-1

Other means of identification

Synonyms No information available.

Application

Recommended Use Not determined
Uses advised against For industrial use only

Supplier/Manufacturer:

2. HAZARDS IDENTIFICATION

Classification

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

Acute Toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Chronic aquatic toxicity	Category 3

Label Elements

Emergency Overview

DANGER

Hazard Statements
harmful if swallowed
Causes severe skin burns and eye damage
Harmful to aquatic life with long lasting effects

Appearance Dark green **Physical State** Liquid **Odor** Strong, Pungent

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection
Avoid release to the environment

Precautionary Statements - Response
Immediately call a POISON CENTER or doctor/physician
Specific treatment (see first aid on this label)
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
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth Do not induce vomiting

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
None known

Other Information
Harmful to aquatic life

Unknown acute toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS No.	Weight %
Ferrous chloride	7758-94-3	10 - 20%
Chromic chloride, basic	50925-66-1	5 - 10%
Hydrochloric acid	7647-01-0	1 - 5%

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

4. FIRST AID MEASURES

General advice: Show this safety data sheet to the doctor in attendance. Remove contaminated clothing and shoes. Wash contaminated clothing before re-use. Wash off with soap and water. If symptoms persist, call a physician.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately

Skin contact: Remove contaminated clothing and shoes. Wash contaminated clothing before re-use. Wash off with soap and plenty of water. Call a physician immediately.

Ingestion:	If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting. If victim is conscious, give water. Never give anything by mouth to an unconscious person.
Inhalation:	Move to fresh air in case of accidental inhalation of vapors. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician.
Note to physician:	In case of ingestion, the stomach should be emptied by gastric lavage under qualified medical supervision. Material is corrosive. It may not be advisable to induce vomiting. Possible mucosal damage may contraindicate the use of gastric lavage.
Medical condition aggravated by exposure:	Dermatitis and asthma.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Use dry chemical, CO2, water spray or `alcohol` foam.
Specific hazards:	Do not allow material to contaminate ground water system.
Special protective equipment for fire-fighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
Specific methods:	Water mist may be used to cool closed containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Ensure adequate ventilation. Avoid contact with the skin and the eyes Do not breathe vapour/dust. Use personal protective equipment. Wash thoroughly after handling
Environmental precautions:	Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so.
Methods for cleaning up:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Handling

Technical measures/precautions:	Provide sufficient air exchange and/or exhaust in work rooms.
Safe handling advice:	In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin and eyes. Do not breathe vapors or spray mist. Wear personal protective equipment. Wash thoroughly after handling. Keep container tightly closed.

Storage

Technical measures/storage conditions:	DO NOT FREEZE Store in original container Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from direct sunlight

Incompatible products: See Section 10, Materials to avoid.

Safe storage temperature: 40 - 100 ° F

Shelf life: 12 months

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components	ACGIH Exposure Limits	OSHA TWA (final)	NIOSH - Pocket Guide
Ferrous chloride	1 mg/m³ (TWA)	None	1 mg/m³ (TWA)
Hydrochloric acid	None	None	5 ppm (Ceiling) 7 mg/m³ (Ceiling)

Engineering measures: Ensure adequate ventilation.

Personal Protective Equipment:

General: Eye Wash and Safety Shower

Respiratory protection: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, a NIOSH-certified respirator with organic vapor/P100 filter should be worn.

Eye protection: Goggles. Face-shield.

Hand protection: Neoprene gloves

Skin and body protection: Chemical resistant apron Long sleeved clothing

Hygiene measures: Avoid contact with skin, eyes and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Dark green
Odor	Strong, Pungent
Odor Threshold	No information available.
pH:	1
pH Dilution	No information available
Melting/freezing point	No information available
Boiling Point/Range	~ 100 °C / 212 °F

Flash Point	No information available
Method	No information available
Evaporation rate	No information available
Flammability Limits in Air	
upper flammability limit	No information available.
lower flammability limit	No information available.
VOC Content	No information available
Vapor pressure	No information available.
Vapor density	No information available.
Specific Gravity (g/cc, 15 C)	1.21
Bulk Density (lb/gal, 15 C)	10.10
Water Solubility	Insoluble
Solubility in other solvents	No information available.
Partition coefficient: n-octanol/water	No information available
Autoignition temperature	No information available
Decomposition Temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
Molecular Weight	No information available

10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.

Conditions to avoid: Heat, flames and sparks.

Materials to avoid: Alkali metals. Strong bases. Potassium. Sodium. ethylene oxide. Gives off hydrogen by reaction with metals.

Hazardous decomposition products: HCl, Cl2. iron oxides.

Hazardous Polymerization: Not applicable.

11. TOXICOLOGICAL INFORMATION

No toxicological information is available on the product. Data obtained on components are summarized below.

Information on likely routes of exposure

Inhalation May cause irritation of respiratory tract.

Eye Contact Corrosive to the eyes and may cause severe damage including blindness.

Skin Contact Contact causes severe skin irritation and possible burns.

Ingestion Harmful if swallowed.

Components	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ferrous chloride	450 mg/kg (Rat)	-	-
Chromic chloride, basic	-	-	-
Hydrochloric acid	700 mg/kg (Rat)	5010 mg/kg (Rabbit)	3120 ppm (Rat) 1 h

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

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen

Components	IARC Carcinogens	NTP	OSHA - Select Carcinogens
Ferrous chloride	Not listed	Not listed	Not listed
Chromic chloride, basic	Not listed	Not listed	Not listed
Hydrochloric acid	Not listed	Not listed	Not listed

Sensitization No information available.

Mutagenic effects: No information available.

Reproductive Toxicity No information available.

Developmental Toxicity No information available.

Teratogenic No information available.

Specific target organ systemic toxicity (single exposure) No information available.

Specific target organ systemic toxicity (repeated exposure) No information available.

Aspiration hazard No information available.

Additional information on toxicological effects
No information available

12. ECOLOGICAL INFORMATION

Components	Ecotoxicity - Fish Species Data:	Ecotoxicity - Freshwater Algae Data:	Ecotoxicity - Water Flea Data:
Ferrous chloride	No data	No data	No data
Chromic chloride, basic	No data	No data	No data

Hydrochloric acid	No data	No data	No data

5% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and Degradability No information available.

Bioaccumulation No information available.

Components	Octanol/water partition coefficient
Ferrous chloride	-
Chromic chloride, basic	-
Hydrochloric acid	-

Mobility: No data available

Ozone: No data available

13. DISPOSAL CONSIDERATIONS

Waste from residues/unused products: Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.

Contaminated packaging: Do not re-use empty containers

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

Components Chromic chloride, basic
50925-66-1

RCRA - Hazardous Constituents - Appendix:	hazardous constituent - no waste number

14. TRANSPORT INFORMATION

U. S. DEPARTMENT OF TRANSPORTATION:

UN/NA ID Number:	UN3264
Proper shipping name:	Corrosive liquid, acidic, inorganic, n.o.s.(hydrochloric acid, ferrous chloride)
Hazard class:	8
PG:	II
RQ	Ferrous chloride, RQ kg = 259
DOT ERG:	ERG 154
Additional DOT Information:	Not applicable for packages of 5 gallons or less

TDG (CANADA):

UN nr:	UN3264
Proper shipping name:	Corrosive liquid, acidic, inorganic, n.o.s.(hydrochloric acid, ferrous chloride)
TDG Hazard Classification:	8
Packing group:	II

IMDG/IMO:

UN nr:	UN3264
Proper shipping name:	Corrosive liquid, acidic, inorganic, n.o.s.(hydrochloric acid, ferrous chloride)
Class:	8
Packing group:	II
EMS:	F-A, S-B
Limited quantity:	1 L

IATA/ICAO:

UN nr:	UN3264
Proper shipping name:	Corrosive liquid, acidic, inorganic, n.o.s.(hydrochloric acid, ferrous chloride)
Hazard Class:	8
Packing group:	II
Maximum quantity for cargo only:	60 L
Maximum quantity for passenger:	5L
Limited quantity:	0.5 L

15. REGULATORY INFORMATION

Federal Regulations

OSHA Hazard Communication Standard: This product is considered to be hazardous under the OSHA Hazard Communication Standard.

CERCLA/SARA Information:

SARA (311, 312) hazard class: This product possesses the following SARA Hazard Categories:

Immediate Health (Acute):	Yes
Delayed Health (Chronic):	Yes
Flammability:	No
Pressure:	No
Reactivity:	No

Components	Hazardous Substances and RQs	Extremely Hazardous Substances and TPQs	SARA 313 Emission Reporting
Ferrous chloride	100 lb	Not listed	Not listed
Chromic chloride, basic	Not listed	Not listed	Not listed
Hydrochloric acid	5000 lb	500 lb	1.0 %

Clean Air and Clean Water Acts:

Components	Hazardous Air Pollutants	CWA - Hazardous Substances	CWA - Toxic Pollutants	CWA - Priority Pollutants
Ferrous chloride	Not listed	Listed	Not listed	Not listed
Chromic chloride, basic	Listed	Not listed	Listed	Not listed
Hydrochloric acid	Listed	Listed	Not listed	Not listed

U.S. STATE REGULATIONS (RTK):

Components	California Proposition 65	PARTK	MI Critical Materials	NJRTK	MARTK
Ferrous chloride	Not Listed	Environmental hazard	Not Listed	0930	Present
Chromic chloride, basic	Not Listed	Environmental hazard	100 lb	2245	Not Listed
Hydrochloric acid	Not Listed	Environmental hazard	Not Listed	1012	Extraordinarily hazardous

California Proposition 65 Status: No components are listed

RCRA Status: To be disposed of as characteristic hazardous waste: Corrosive D002

CANADIAN REGULATIONS:

Canada - WHMIS Classification Information: This product has been classified according to the hazard criteria of the CPR and the SDS contains all the information required by the CPR.

Canadian Product Classification: Class E - Corrosive Material
Class D1

Product Classification Graphic(s):

Component Classification Data:

Components	WHMIS hazard class	CEPA Schedule I	Challenge Substances
Ferrous chloride	E	Not listed	Not listed
Chromic chloride, basic	None	Not listed	Not listed
Hydrochloric acid	D1A E	Not listed	Not listed

INVENTORY STATUS:

United States TSCA - Sect. 8(b) Inventory: This product complies with TSCA

Canada DSL/NDSL Inventory List This product complies with DSL

16. OTHER INFORMATION

Sources of key data used to compile the data sheet: Material safety data sheets of the ingredients.

Prepared by: Quaker Chemical Corporation -Safety, Health and Environmental Affairs Group - US

Revision Date: 03/27/2015
Reason for revision: New Format.

Personal protection recommendations should be reviewed by purchasers. Workplace conditions are important factors in specifying adequate protection.

Disclaimer

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End of Safety Data Sheet