SAFETY DATA SHEET

NOTICE: Judgment may be based on indirect test and technical literature. The OSHA Hazard Communication Standard only requires SDS's and special labeling for materials defined as "HAZARDOUS"; see 29 CFR 1910.1200 (c). This document may be about a product which is NOT hazardous but is provided as information for our customers. See references for information.

SECTION 1. IDENTIFICATION

Product Identifier: ER-190
Product Use: Super Concentrated Emulsion Remover
Manufactured by: Kor-Chem, Inc.
5800 Bucknell Drive
Atlanta, GA 30336

Product Identification # (PIF): 01486
Emergency Telephone #: 1-800-255-3924
General Information #: 404-344-9580
Date Prepared: May 28, 2015
Date Revised: July 27, 2016 – version #2

SECTION 2. HAZARD(S) IDENTIFICATION

GHS Hazard Codification:



Signal Word: DANGER

Hazard Statement	Category	Code	Hazard Class
May intensify fire; oxidizer	2	H272	Oxidizing Liquid
May be corrosive to metals	1	H290	Corrosive to Metals
May be harmful if swallowed	5	H303	Acute Toxicity, Oral
Causes severe skin burns and eye damage	1B	H314	Skin Corrosion

Precautionary Measures:

Category	Code	Statement
Prevention	P210	Keep away from heat/sparks/open flames/hot surfaces – No smoking.
	P220	Keep away from clothing/combustible materials.
	P221	Take any precaution to avoid mixing with combustibles.
	P234	Keep only in original container.
	P260	Do not breathe fumes/mists/ vapors/sprays.
	P264	Wash thoroughly after handling.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response	P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
	P303+P361+P353	IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.
	P363	Wash contaminated clothing before reuse.
	P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P310	Immediately call a POISON CENTER or doctor/physician.
	P321	Specific treatments: See section 4 First Aid Measures.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
	P370+P378	In case of fire: Use foam, dry chemical, carbon dioxide fire extinguishers or water spray for extinction.
	P390	Absorb spillage to prevent material damage.
Storage	P404	Store in a closed container.
	P405	Store locked up.
Disposal	P501	Dispose of contents/container in compliance with all Federal, State/Provincial and local laws and regulations

Hazards not otherwise classified: Inhaling mists/sprays of product – corrosive to the respiratory tract. Ingestion – corrosive to the entire gastrointestinal tract. Contact with acid generates toxic gas. May develop highly toxic or corrosive fumes if heated.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	Common Name	CAS #	Concentration Range %
Periodic Acid	None known	10450-60-9	37 - 41
Linear Sodium Diphenyl Oxide Disulfonate Surfactant	Proprietary	Mixture	5 – 9

SECTION 4. FIRST AID MEASURES

Eyes: Flush well with water for at least 15 minutes, holding eyelids open. Remove any contact lenses and continue rinsing. Seek medical attention immediately.
Skin: Immediately wash with soap and water for at least 15 minutes. Remove contaminated clothing and launder before reuse. If irritation persists, seek medical attention immediately.
Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician immediately. If breathing is difficult, have a trained person administer oxygen. If respiration stops, have a trained person administer artificial respiration by way of pocket mask equipped with one-way valve or other proper respiratory device – Do NOT use mouth-to-mouth method if victim inhaled material. Call a physician.
Ingestion: DO NOT INDUCE VOMITING. Call a physician immediately. Rinse mouth, then give 1-2 glasses of water. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

SECTION 5. FIRE-FIGHTING MEASURES

Flash Point: Not flammable
Flammability: Not flammable
Extinguishing Media: Foam, dry chemical, carbon dioxide fire extinguishers, water spray. Do not spray water directly on fire. Use water spray to cool containers.
Specific hazards arising from chemical: Oxidizer – may ignite other combustible materials. May develop highly toxic or corrosive fumes if heated.
Hazardous combustion products: Toxic and corrosive gases.
Firefighting protective equipment: Wear a self-contained breathing apparatus with a full face piece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment.
Sensitivity to static discharge: This product is not flammable.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment (Section 8). Keep away from heat/sparks/open flames/hot surfaces – No smoking. Keep away from clothing and combustible materials. Do not breathe fumes/mists/vapors/sprays. Wash thoroughly after handling.
For Small Spills: Spilled material is slippery. Avoid dispersal of material and runoff into soil, waterways, drains and Absorb spill with vermiculite or other inert material, then place in a container securely for chemical waste. Wash walking surfaces with water. Dispose of contaminated absorbent material in accordance with local, state and federal regulations.
For Large Spills: Large spills cannot occur due to packaging.

SECTION 7. HANDLING AND STORAGE

Handling: Wear personal protection equipment (Section 8). Use with adequate ventilation. Do not breathe fumes/mists/vapors/sprays. Keep away from heat/sparks/open flames/hot surfaces – No smoking. Keep away from clothing/combustible materials. Take any precaution to avoid mixing with combustibles. Do not premix with other chemicals. Empty containers may contain residue and can be dangerous. Do not eat, drink or smoke in work areas. Wash thoroughly after handling.
Storage: Oxidizer. Keep away from heat, flame, or sunlight. Keep only in original container. Keep from freezing. Keep container tightly closed when not in use. Store locked up. Protect from physical damage. Store away from strong reducing agents, strong acids and flammable/combustible material.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredient	CAS #	OSHA/PEL	ACGIH/TLV	STEL
Periodic Acid	10450-60-9	Not established	Not established	Not established
Linear Sodium Diphenyl Oxide Disulfonate Surfactant	Mixture	Not established	Not established	Not established

Engineering Controls: Provide adequate ventilation. Keep the risk of exposure to a minimum.
Personal protective equipment:

Eye: Safety glasses with side shields or splash proof goggles and face shield.
Skin: Chemical resistant (impervious) gloves. Normal materials handling clothing and apron. Boots.
Respirator: Use NIOSH approved protection if vapors are causing irritation, or if mists/sprays are generated.
Other: Use only in a well ventilated area. Do not eat, drink or smoke while handling. Wash thoroughly after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colorless, clear liquid	Upper/Lower flammability limits	Not determined
Odor	Acid fumes	Vapor pressure	Not determined
Odor threshold	Not determined	Vapor density (Air = 1)	Not determined
pH 1%	0.5 – 1.5	Specific gravity (water = 1.0)	1.465 g/ml
Melting point	Not determined	Solubility	Complete in water
Freezing point	Not determined	Partition coefficient (n-octanol/water)	Not determined
Boiling point	Not determined	Auto-ignition temperature	Not determined
Flash point	Not flammable	Decomposition temperature	Not determined
Evaporation rate (n-butyl acetate=1)	<1	Viscosity	Not determined
Flammability	Not flammable	VOC by weight	0%

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Contact with acid generates toxic gas. Oxidizer – may ignite other combustible materials. May develop highly toxic or corrosive fumes if heated.
Chemical stability: Stable under normal, ambient temperature and conditions.
Possibility of hazardous reactions: Hazardous polymerization will not occur.
Conditions to avoid: Heat, flame and sparks. Keep from freezing. Do not mix with other chemicals
Incompatible materials: Avoid strong reducing agents, strong acids and flammable/combustible material.
Hazardous combustion products: Toxic and corrosive gases.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicity:

Oral (LD50 Rat): Not determined
Dermal (LD50 Rabbit): Not determined
Inhalation (LC50 Rat): Not determined

Skin corrosion/irritation: Corrosive to skin. Symptoms may include burns, blisters, ulceration and scarring. Prolonged contact causes serious tissue damage.

Serious eye damage/irritation: Corrosive to eyes. Symptoms may include severe irritation, disintegration, scarring and clouding. Symptoms may persist for several days. Risk of serious damage to eyes if left untreated.
Respiratory or skin sensitization: Inhaling mists/sprays of material is corrosive to respiratory tract and may cause pulmonary edema (shortness of breath and tightness of chest).
Germ cell mutagenicity: No data available
Carcinocenicity: NTP/IARC/OSHA Carcinogen: No
Reproductive toxicity: Not available
STOT-single exposure: Not classified.
STOT-repeated exposure: Not classified
Aspiration hazard: Not classified
Ingestion: Corrosive to digestive tract. May cause severe pain, burning, vomiting and diarrhea. Lung aspiration may result in chemical pneumonitis, pulmonary edema, damage to lung tissue, and in extreme cases death.
Likely routes of exposure: Eyes, skin
Interactive effects: None known.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity:

96h LC-50 (fish): Not determined
96h EC-50 (invertebrates): Not determined
48h LC-50 (algae): Not determined

Persistence and degradability: Periodic acid is inorganic.
Bioaccumulative potential: Not determined.
Mobility in soil: Soil mobility not determined. This product is soluble in water and may spread in water systems.
Other adverse effects: This product can lower the pH of an aquatic environment, and thus be toxic to fish and aquatic plants. As with all chemicals, work practices should be aimed at eliminating environmental releases.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal of Wastes: Do not dump into sewers, on the ground or into any waterways. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations.
Contaminated Packaging: Since emptied containers retain product residue, follow label warnings even after container is emptied. Do not cut, drill, grind or weld on or near the container.
RCRA: A waste containing this product may have the RCRA hazardous waste no. D002 (Corrosive) (40 CFR 261.22).

SECTION 14. TRANSPORT INFORMATION

United States DOT:

UN/ID No.: UN3093
Proper Shipping Name: Corrosive Liquid, Oxidizing, n.o.s., (Periodic Acid)
Hazard Class: 8, 5.1
Packing Group: II

IATA and IMDG:

UN/ID No.: UN3093
Proper Shipping Name: Corrosive Liquid, Oxidizing, n.o.s., (Periodic Acid)
Hazard Class: 8, 5.1
Packing Group: II
Marine Pollutant (IMDG Code): Not listed (49 CFR 172.101)
Transportation in bulk (IMDG - Annex II of MARPOL 73/78 and IBC Code): Not offered in bulk for transport overseas.

SECTION 15. REGULATORY INFORMATION

TSCA: All components of this product are on the TSCA inventory or are exempt from TSCA inventory requirements under 40 CFR 720.30.
SARA Section 302: The components of this product are either not regulated or regulated, but present in negligible concentrations.
SARA TITLE III Section 311/312:

Immediate (Acute) Health	Yes	Fire Hazard	No
Delayed (Chronic) Health	No	Reactive Hazard	Yes

SARA Title 313: This material does not contain any chemical components with known CAS numbers that exceed the De Minimis reporting levels (40 CFR 372).
CERCLA: This product does not have a reportable quantity.
United States Right-To-Know: None known.
Proposition 65: This material does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
RCRA: A waste containing this product may have the RCRA hazardous waste no. D002 (Corrosive) (40 CFR 261.22).

SECTION 16. OTHER INFORMATION

Date Prepared: July 27, 2016 version #2 – SDS updated to meet revision #5 GHS requirements.
Hazard Ratings (HMIS): Health 3, Flammability 0, Reactivity 1. Personal Protection Rating to be supplied by user based on use conditions.
Carefully read all instructions on label before handling this product.
Keep out of reach of children.
"FOR INDUSTRIAL USE ONLY"

Abbreviation	Full Name/Explanation
ACGIH	American Conference of Government Industrial Hygienists

CAS	Chemical Abstract Service
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CNS	Central Nervous System
CFR	Code of Federal Regulations
DOT	Department of Transportation
EC	Effective Concentration
HMIS	Hazardous Material Information System
IARC	International Agency for Research on Cancer
LC	Lethal Concentration
LD	Lethal Dose
NA	Not Applicable
ND	Not Determined
NE	Not Established
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation Recovery Act
SARA	Superfund Amendments and Reauthorization Act
SE	Single Exposure
STEL	Short-Term Exposure Limit
STOT	Specific Target Organ Toxicity
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
VOC	Volatile Organic Compounds

The information contained herein is based on data available to us and is believed to be correct. We make no warranty, however, expressed or implied regarding the accuracy of these data or the results obtained from the use thereof.
Regulatory Standards: DOT TITLE 49, Code of Federal Regulations 172.101: Parts 100 to 177, Revised 10/1/92.
SUPER FUND AMENDMENTS REAUTHORIZATION ACT OF 1986, TITLE III TOXIC SUBSTANCE CONTROL ACT LIST (TSCA)- INGREDIENTS LISTED. REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES NATIONAL TOXICOLOGICAL PROGRAM (NTP) REPORT OF CARCINOGENS INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) MONOGRAPHS, OCCUPATIONAL SAFETY & HEALTH REGULATIONS. CODE OF FED. REGS. FOOD & DRUG, 21 PARTS 170 to 199, Revised 4/1/91, 173.310.