SAFETY DATA SHEET
Shock Oxidizer

PRODUCT NAME: Shock Oxidizer
Revision date: 6/2/2014

SECTION 1 ***IDENTIFICATION***

Supplier: Phoenix Product Company
55 Container Drive
Terryville, CT 06786
(860) 589-7502

Distributor: ESSENTIALS
5070 Wallace Drive
Cumming, GA 30041

Telephone: (626) 305-1182

Emergency Telephone:
U.S. PERS Emergency Telephone 1-800-633-8253

SECTION 2 ***COMPOSITION, INFORMATION ON INGREDIENTS***

Chemical Name	*CAS #*
Potassium Peroxymonosulfate	10058-23-8
Potassium Bisulfate	7646-93-7
Potassium Sulfate	7778-80-5
Potassium Peroxydisulfate	7727-21-1
Sodium Carbonate	497-19-8

SECTION 3 ***HAZARDS IDENTIFICATION***

Potential Acute Health Effects:

Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Hazardous in case of skin contact (corrosive), of eye contact (corrosive). The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Prolonged exposure may result in skin burns and ulcerations. Over-exposure by inhalation may cause respiratory irritation. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage.

SECTION 4 *FIRST-AID MEASURES*

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Skin Contact:
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream.
Seek immediate medical attention.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.

Serious Inhalation:
Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion:
Do **NOT** induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

SECTION 5 *FIRE FIGHTING MEASURES*

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards:
Contact with combustible materials may cause fire. Improper storage of large masses of this product can trap heat and lead to ignition of combustibles (see section on "handling and storage"). Grinding or intensive mixing may cause decomposition with liberation of heat and oxygen; ignition of oxidizable material if present may occur.

Special Remarks on Explosion Hazards: Not available.

SECTION 6 *ACCIDENTAL RELEASE MEASURES*

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. If necessary: Neutralize the residue with a dilute solution of sodium carbonate.

Large Spill:

Oxidizing material. Corrosive solid. Stop leak if without risk. Do not get water inside container. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Neutralize the residue with a dilute solution of sodium carbonate. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

SECTION 7 *HANDLING AND STORAGE*

Precautions:

Keep container dry. Keep away from heat. Keep away from sources of ignition. Keep away from combustible material. Do not ingest. Do not breathe dust. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as combustible materials, organic materials, metals.

Storage:

Keep container tightly closed. Keep container in a cool, well-ventilated area away from heat sources such as light fixtures or space heaters. Separate from acids, alkalies, reducing agents and combustibles. See NFPA 43A, Code for the Storage of Liquid and Solid Oxidizers. Do not store above 24°C (75.2°F). Pallets of 25 kg. bags can be stacked. Don't stack pallets directly on top of each other. Leave open space on all sides of each pallet to provide ventilation. See local fire codes for allowable limits. Bulk bags should be stored on pallets; if stacked use pyramid style, no more than 2 pallets high. Closely stacked bags should not exceed a 4 ft. (1.2 M) cube. Keep packages dry. Do not store with combustible materials or with incompatibles (see "Incompatibility with Other Materials.")

SECTION 8 *EXPOSURE CONTROLS/PERSONAL PROTECTION*

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:

Splash goggles. Synthetic apron. Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

SECTION 8 *EXPOSURE CONTROLS/PERSONAL PROTECTION - Continued*

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Vapor and dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: TWA: 5 (mg/m3) from exposure OSHA (PEL) [United States] Inhalation Respirable.

TWA: 15 (mg/m3) from OSHA (PEL) [United States] Inhalation Total. Consult local authorities for acceptable exposure limits.

SECTION 9 *PHYSICAL AND CHEMICAL PROPERTIES*

Physical State and Appearance: Solid. (Granular solid, free flowing solid)

Molecular Weight: Not Available

Color: White

pH (1% soln/water): 2.3 [Acidic]

Boiling Point: Decomposes

Melting Point: Decomposes

Specific Gravity: 1.1 – 1.4

Vapor Pressure (mm Hg): Not Applicable

Vapor Density: Not available

Volatility: Not Available

Odor Threshold: Not available

Dispersion Properties: See solubility in water.

Solubility: Partially soluble in cold water.

SECTION 10 *STABILITY AND REACTIVITY*

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Combustible materials and incompatible materials, close storage.

Incompatibility with various substances: Highly reactive with combustible materials. reactive with organic materials, metals.

Corrosivity: Not available.

Special Remarks on Reactivity:
This compound is an acid and an oxidizer. This compound is hygroscopic. Incompatible with acetone, combustible materials (saw dust, sweeping compounds), salts (sodium, bromine, etc.) + water. The mixture of this product" with compounds containing halides or active halogens can cause release of respective halogen if moisture is present. For example, mixing sodium dichloroisocyanurate or, sodium chloride, or sodium bromide can cause the release of chlorine or bromine gas. Mixing with cyanides can cause release of hydrogen gas. Mixing with metal salts such as those of cobalt, nickel, copper or manganese can cause decomposition with release of oxygen and heat.

SECTION 11 *TOXICOLOGICAL INFORMATION*

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals:
WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 2000 mg/kg [Rat]. Acute dermal toxicity (LD50): 11000 mg/kg [Rabbit]. Acute toxicity of the dust (LC50): >5 mg/l 4 hours [Rat].

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans:
Very hazardous in case of skin contact (irritant), of ingestion, of inhalation. Hazardous in case of skin contact (corrosive), of eye contact (corrosive).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available

SECTION 12 *ECOLOGICAL INFORMATION*

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation: **Po**ssibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

SECTION 13 *DISPOSAL CONSIDERATIONS*

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

SECTION 14 *TRANSPORTATION DATA*

U.S. DEPARTMENT OF TRANSPORTATION (DOT):

Proper Shipping Name: Not regulated
Hazard Class: Not regulated
Identification (UN Number): Not regulated
Packing Group (PG) Not Regulated

SECTION 15 *REGULATORY INFORMATION*

SARA 313 Regulated Chemicals: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

TSCA: Listed

CALIFORNIA PROP. 65: No chemicals known to the State of California to cause cancer, birth defects or Any other harm.

Title III Hazard Classification:
Acute Health Hazard: Yes
Chronic Health Hazard: No
Fire: No
Reactivity/Physical hazard: No
Pressure: No

SECTION 16 ***ADDITIONAL INFORMATION***

Hazard Ratings:

NFPA:	Health 3;	Flammability 0;	Reactivity 1
HMIS:	Health 3;	Flammability 0;	Reactivity 1

Personal Protection (PPE) rating to be supplied by user depending on use conditions.

REVISION INFORMATION:
SDS section(s) changed since last revision of document:

- DOT Shipping description changed from corrosive to not regulated.
- Section 15 changed to language appropriate to DOT shipping change.
- Section 16 added PPE information

Representations or warranties, either expressed or implied, of merchant ability, fitness for a particular purpose or any other nature are made hereunder with respect to information or the product to which information refers.

Revision Date: 6/2/2014
Supersedes: 4/13/2013