SAFETY DATA SHEET

Section 1: IDENTIFICATION

Product Name: Brite Whitener
Product Code: B2250
MSDS Date: June 16, 2014

Chemisphere Corporation
2101 Clifton Ave
St. Louis, MO 63139

General Information: 314-644-1300
CHEMTREC: 800-424-9300

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

GHS Classification:
Acute toxicity, Oral (Category 4), H302
Acute toxicity, Dermal (Category 4), H312
Serious eye damage (Category 1), H318

GHS Labeling

Symbol:

Signal Word: Danger

Hazard Statements:
Harmful if swallowed.
Harmful in contact with skin.
Causes serious eye damage.

Precautionary Statements:
Prevention:
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing.
Wear eye protection/face protection.
Response:
If swallowed: Immediately call a poison center/doctor. Rinse mouth.
If on skin: wash with plenty of water.
Call a poison center/doctor if you feel unwell.
Take off contaminated clothing and wash it before reuse.
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/doctor.
Disposal:
Dispose of contents/ container in accordance with local/regional/national/international regulations.

Potential Health Effects: See Section 11 for more information

This product does not contain carcinogens or potential carcinogens as listed by IARC, NTP, or ACGIH.

This material contains components that are considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential Environmental Effects: See Section 12 for more information.

Section 3: COMPOSTION/INFORMATION ON INGREDIENTS

No.	Component CAS REG. NO.	Amount %	OSHA		ACGIH	
			TWA	STEL	TWA	STEL
1	Oxalic Acid CAS #144-62-7	50-100	1 mg/m3	2 mg/m3	1 mg/m3	2 mg/m3

Section 4: FIRST AID MEASURES

Emergency first aid procedures by route of exposure:

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Skin: Wash off with soap and plenty of water. Consult a physician.
Eyes: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

General advice
Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.

Section 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media:
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Products of Combustion:
Upon decomposition this product may emit carbon dioxide, carbon monoxide, and/or low molecular weight hydrocarbons.

Fire Fighting Equipment/Instructions:
Wear self contained breathing apparatus for fire fighting if necessary.

HAZARD	HMIS	NFPA
Toxicity	3	3
Fire	0	0
Reactivity	0	0

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Protection: Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

Environmental Precautions: Do not let product enter drains.

Method for Containment: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7: HANDLING AND STORAGE

Handling:
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.

Storage:
Keep container tightly closed in a dry and well-ventilated place.
Moisture sensitive.

Section 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Personal Protective Equipment (PPE)

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye/Face Protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hand Protection: Wear chemical resistant gloves such as Butyl rubber or Viton.

Body: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Other Protective Equipment:
Facilities storing or utilizing this material should be equipped with eyewash and/or shower facilities.

See section 3 for exposure limits.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance Form: crystalline
Color: white
Odor odorless
Odor Threshold no data available
pH 1.3 at 9 g/l
Melting point/freezing point
Melting point/range: 189.5 °C (373.1 °F) - dec.
Melting point/range: 189.5 °C (373.1 °F) - dec.
Initial boiling point and boiling range
157 °C (315 °F) at 1,013 hPa (760 mmHg)
Flash point no data available
Evaporation rate no data available
Flammability (solid, gas) no data available
Upper/lower flammability or explosive limits no data available
Vapor pressure < 0.01 hPa (< 0.01 mmHg) at 20 °C (68 °F)
Vapor density no data available
Relative density 1.9 g/cm3 at 25 °C (77 °F)
Water solubility 108 g/l at 25 °C (77 °F) - soluble
Partition coefficient: noctanol/ water no data available
Auto-ignition temperature no data available
Decomposition temperature no data available

Viscosity no data available
Explosive properties no data available
Oxidizing properties no data available

Section 10: STABILITY AND REACTIVITY

Stability: This material is considered stable at ambient temperatures 70ºC (21ºC).

Condition to Avoid: Moisture.

Incompatible Materials: Metals, Alkali metals

Hazardous Decomposition: no data available

Hazardous Reactions: This product will not undergo polymerization.

Section 11: TOXICOLOGICAL INFORMATION

ACUTE EFFECTS:
Component Analysis LD50
LD50 Oral - rat - female - 1,080 mg/kg
LD50 Dermal - rabbit - 20,000 mg/kg

CHRONIC EFFECTS:
Component
Carcinogenic Effects: Not listed as a carcinogen by IARC, ACGIH, NTP, and OSHA.
Mutagenic Effects: S. typhimurium Result: negative
Teratogenic Effects: Not Available
Developmental Toxicity: Not Available
Reproductive toxicity Possible risk of congenital malformation in the fetus. Reproductive toxicity - mouse – Oral Effects on Fertility: Other measures of fertility Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).
Target Organs: Skin - rabbit
Result: No skin irritation Eyes - rabbit
Result: Risk of serious damage to eyes. - 24 h

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: static test LC50 - Leuciscus idus melanotus - 160 mg/l - 48 h
Immobilization EC50 - Daphnia magna (Water flea) - 162.2 mg/l - 48 h
(OECD Test Guideline 202)

Section 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state, and federal regulations.

Section 14: TRANSPORT INFORMATION

Proper Shipping Name: Corrosive Solid, acidic, organic, n.o.s.
Hazard Class: 8
Identification No.: UN3261
Packing Group: II
Label: Corrosive

Section 15: REGULATORY INFORMATION

TSCA Inventory This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.

SARA 302/304 The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.

SARA 313: No components were identified.

CERCLA The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances present in this product or refinery stream that may be subject to this statute are: No components were identified.

SARA 311/312 Hazard The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories: Acute, Chronic

California Prop 65: No components were identified.

Section 16: OTHER SUPPLEMENTAL INFORMATION

Prepared by: Chemisphere Corp. on 6/16/14

Disclaimer:
The information and recommendations contained in the Safety Data Sheet (SDS) are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. The information and recommendations set forth herein are presented in good faith and believed to be correct as of this date hereof.

Chemisphere, however, makes no representation as to the completeness or accuracy thereof, and information is supplied upon the express condition that the persons receiving the information will be required to make their own determination as to its suitability for their purposes prior to use. In no event will Chemisphere be responsible for any damages of any nature whatsoever resulting from the use of, reliance upon, or the misuse of this information. User assumes all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations.

NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OF ANY OTHER NATURE, ARE MADE BY CHEMISPHERE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH THE INFORMATION REFERS. The information as supplied herein is simply to be informative and intended solely to alert the user of the substance which is the subject matter of this SDS. The ultimate compliance with federal, state or local regulations concerning the use of this compound, or compliance with respect to product liability, rests solely upon the purchaser thereof.

This information relates to the material designated and may not be valid for such material used in combination with any other materials nor in any process.