MATERIAL SAFETY DATA SHEET

SECTION I - GENERAL INFORMATION

MANUFACTURER'S NAME: Empire Blended Products, Inc.
MANUFACTURER'S ADDRESS: 250 Hickory Lane
Bayville, New Jersey 08721
EMERGENCY PHONE NUMBER: (732) 269-4949

PRODUCT NAME: OXALIC ACID
TRADE NAME AND SYNONYMS: Rainbow Oxalic Acid Rockler SKU: 59840
CHEMICAL NAME: Ethanedioic Acid
CHEMICAL FAMILY: 
FORMULA: \(\text{C}_2\text{H}_2\text{O}_4\)

SECTION II - HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS #</th>
<th>%</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxalic Acid</td>
<td>144-62-7</td>
<td>100</td>
<td>1mg/m³ 8hr TWA</td>
<td>1mg/m³ 8hr TWA</td>
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</tbody>
</table>

This material is listed in the TSCA Inventory. Not listed as carcinogenic by IARC, NTP, OSHA, ACHIH

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: 760 mm Hg: Sublimes @ 157°C
MELTING POINT: Decomposes @ 187° - 189°C
VAPOR PRESSURE: 0.54 (105°C)
VAPOR DENSITY: N/A
SOLUBILITY IN WATER: 1gm/7cm³ H₂O
SPECIFIC GRAVITY: (H₂O = 1): 1.653 for dihydrate @ 16.5°C
1.90 for anhydrous @ 17°C
PERCENT VAPOROUS BY VOLUME: Non-volatile at room temperature
EVAPORATION RATE: N/A
APPEARANCE AND ODOR: White crystalline solid without distinctive odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED): N/A
FLAMMABLE LIMITS: LEL: N/A UEL: N/A
EXTINGUISHING MEDIA: Water spray, dry chemical, "alcohol foam", or carbon dioxide may all be used.

SPECIAL FIRE FIGHTING PROCEDURES:
Pressure demand, self-contained breathing apparatus should be worn by fire fighters in buildings or confined areas where product is stored. Goggles should be worn if eye protection is not provided. Foam or water on molten product may cause frothing. Water spray should be used to keep fire-exposed containers cool.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Reacts with some silver compounds to form explosive silver oxalate.
SECTION V - REACTIVITY DATA

STABILITY: UNSTABLE: ____ STABLE: X
CONDITIONS TO AVOID: Strong alkalies, especially when heated

INCOMPATIBILITY (MATERIALS TO AVOID): Reacts explosively with strong oxidizing materials. Avoid contact with strong acids and alkalies.

HAZARDOUS DECOMPOSITION PRODUCTS: At temperatures above 187°C the product decomposes to carbon dioxide, carbon monoxide, formic acid, and water

HAZARDOUS POLYMERIZATION: MAY OCCUR: ____ WILL NOT OCCUR: X
CONDITIONS TO AVOID:

SECTION VI - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: INHALATION: Yes INGESTION: No
SKIN ABSORPTION: No data NON HAZARDOUS:

CARCINOGENICITY: NTP: No OSHA: No
IARC MONOGRAPH: No NOT LISTED:

HEALTH HAZARDS:
ACUTE: Behaves similarly to other acids, producing severe local burns of eyes, mucous membranes and skin
CHRONIC: Repeated or prolonged skin exposure may result in inflammation and possible corrosion of the skin, with pain and cyanosis of the fingers, even gangrenous changes. Prolonged ingestion can produce hypocalcemia with disturbances in cardiovascular and nervous systems.

SIGNS AND SYMPTOMS OF EXPOSURE:

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

EMERGENCY FIRST AID PROCEDURES:

EYE CONTACT: Immediately and repeatedly flush eyes with water for at least 15 minutes, holding eyelids apart to ensure flushing of entire eye surface. Seek medical attention immediately.

SKIN CONTACT: Wash with plenty of soap and water for at least 15 minutes and remove and wash contaminated clothing. Seek medical attention immediately.

INHALATION: Get person out of contaminated area to fresh air. Seek medical attention immediately.

INGESTION: Give large quantities of water. If available, give several glasses of milk. Do Not Induce Vomiting. Seek medical attention immediately.
SECTION VII - CONTROL AND PROTECTIVE MEASURES

RESPIRATORY PROTECTION (SPECIFIC TYPE): NIOSH approved dust mask

PROTECTIVE GLOVES: Rubber gloves
EYE PROTECTION: Chemical goggles

VENTILATION TO BE USED:
   LOCAL EXHAUST: Yes
   MECHANICAL: No
   SPECIAL: No
   OTHER: No

OTHER PROTECTIVE CLOTHING AND EQUIPMENT: Rubber apron and impervious clothing to avoid skin contact

HYGIENIC WORK PRACTICES: Eyewash stations and chemical safety showers should be readily accessible where this material is stored.

SECTION VIII - PRECAUTION FOR SAFE HANDLING AND USE/LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED: Sweep up or vacuum up into suitable recovery drum for disposal or recovery.

WASTE DISPOSAL METHOD: Consult Federal, State, and Local regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Store in cool, clean, dry area.

OTHER PRECAUTIONS AND/OR SPECIAL HAZARDS: