

MATERIAL SAFETY DATA SHEET

Calcium Indicator Solution, AF Grade

SECTION 1 . Product and Company Identification

Product Name and Synonym: Calcium Indicator Solution, AF Grade

Product Code: 250-01-1

Material Uses:
Manufacturer: OFI Testing Equipment, Inc.
11302 Steeplecrest Drive
Houston, TX 77065 USA
Phone: (713) 880-9885
Fax: (713) 880-9886

Entry Date : 9/8/2009

Print Date: 9/13/2010

24 Hour Emergency Assistance : Chemtrec 800-424-9300
Canutec 613-996-6666

Health:	2			
Flammability:	1			
Reactivity:	1			
Hazard Rating:				
Least	Slight	Moderate	High	Extreme
0	1	2	3	4
NA = Not Applicable		NE = Not Established		

SECTION 2 HAZARD IDENTIFICATION

May be fatal if inhaled, swallowed or absorbed thru the skin. Avoid all contact. Use with adequate ventilation. Wash thoroughly after use. Keep container closed.

Emergency Overview:Poison! Danger! May be fatal if swallowed or inhaled. May cause burns to respiratory tract and severe irritation to skin and eyes. May affect kidneys.

Inhalation:Inhalation of dust is corrosive to mucous membranes. Oxalates can be absorbed through the lungs. Symptoms of poisoning include nervousness, cramps, central nervous system depression.

Corrosive action on the mucosa and severe gastrointestitis can occur with pain, vomiting, etc.

Ingestion:Sharp reduction of serum calcium can cause disfunction of the brain.

Skin:Skin contact may produce severe skin irritation with burning, redness.

Eye Contact:May cause severe irritation and pain. May cause burns.

Chronic Exposure:Circulatory failure or nervous system irregularities may follow prolonged calcium metabolism disturbances due to oxalation.

SECTION 3 MIXTURE COMPONENTS

SARA 313	Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
<input type="checkbox"/>	Ammonium Oxalate	CAS# 6009-70-7	5%	W/V	OSHA PEL 200 ppm acgih TLV 200 PPM STEL 200 PPM
<input type="checkbox"/>	Glycerin (Glycerol)	CAS# 56-81-5	30 - 40%	V/V	OSHA TWA 10 mg/m ³ (total dust)
<input type="checkbox"/>	Water, Deionized ASTM Type II	CAS# 7732-18-5	Balance	V/V	None Established

SECTION 4 FIRST AID MEASURES

May be fatal if inhaled, swallowed or absorbed thru the skin. Avoid all contact. Use with adequate ventilation. Wash thoroughly after use. Keep container closed.

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FIRST AID: SKIN: Wash exposed area with soap and water. If irritation persists, seek medical attention.

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

INGESTION: Give several glasses of milk or water. Vomiting may occur spontaneously, but DO NOT INDUCE! Never give anything by mouth to an unconscious person.

SECTION 5 FIRE FIGHTING MEASURES

Fire Extinguisher Type: Any means suitable for extinguishing surrounding fire
Fire / Explosion Hazards: Toxic gases and vapors may be released in a fire.
Fire Fighting Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Absorb spill with inert material, then place in a chemical waste container. Dispose of in a manner consistent with federal, local law. Do not flush to sewer!
Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill.
Wear appropriate personal protective equipment as specified in section 8. Contain and recover liquid when possible. Collect liquid in a appropriate container and absorb with dry sand, vermiculite, earth or other inert substance and package in a suitable container for disposal. Do not flush to sewer!

SECTION 7 HANDLING AND STORAGE

Keep in a tightly closed container, stored in a cool dry, ventilated area. Protect from freezing. Do not reuse containers.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: None required
Ventilation: Local Exhaust [checked], Mechanical [unchecked]
Protective Gloves: Wear appropriate gloves to prevent skin exposure
Eye Protection: Safety Glasses w/Side Shields
Other Protective Equipment: Use safe laboratory handling procedures.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Melting Point: Information not available Percent Volatile by Volume: ~ 66%
Boiling Point: Information not available Evaporation Rate Information not available
Vapor Pressure: Information Evaporation Standard

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	not available		
Vapor Density:	Information not available	Auto Ignition Temp	Not applicable
Solubility in Water:	Soluble	Lower Flamm. Limit in Air	Not applicable
Appearance /Odors:	Clear odorless liquid	Upper Flamm. Limit in Air	Not applicable
Flash Point:	Not flammable		
Specific Gravity:	Information not available		

SECTION 10 STABILITY AND REACTIVITY INFORMATION

Stability:	Stable
Conditions to Avoid:	Avoid contact with incompatible materials.
Materials to Avoid:	Strong oxidizers. Can react violently with acetic anhydride, chromium oxides and alkali metal hydrides
Hazardous Decomposition Products:	Carbon monoxide, nitrogen oxides, ammonia Acrolein
Hazardous polymerization:	Will Not Occur
Conditions to Avoid:	None known

SECTION 11 Toxicological Information

Carcinogenic References: NTP Carcinogen - Known: No, IARC Category- None

SECTION 12 Ecological Information

Environmental Fate:No information found
Environmental Toxicity:No information found

SECTION 13 Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14 Transport Information

DOT Classification: Not Regulated
DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

SECTION 15 Regulatory Information

Chemical Inventory Status –
Part 1:Ingredient
Ammonium Oxalate (1113-38-8)
TSCA Yes
EC Yes
Japan YES
Australia Yes

Chemical Inventory Status –
Part 2:Ingredient

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Ammonium Oxalate (1113-38-8)
Korea Yes
DSL Yes
NDSL No
Phil. Yes

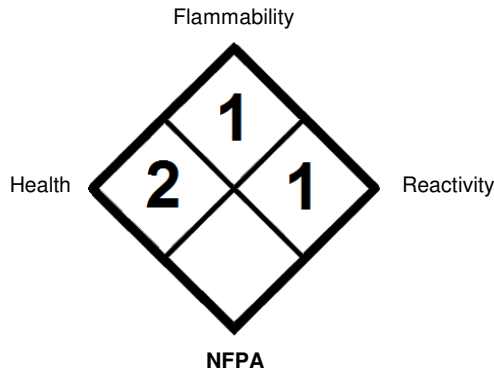
Federal, State & International Regulations –
Part 1: Ingredient.
Ammonium Oxalate (1113-38-8)
RQ No
TPQ No
List NO
Chemical Catg No

Federal, State &
International Regulations –
Part 2:Ingredient
Ammonium Oxalate (1113-38-8)
CERCLA 5000
261.33 No
8(d) No

Chemical Weapons Convention: No
TSCA 12 (b):No
CDTA:No MIXTURE/SOLID
SARA 311/312: Acute:YES
Chronic: YES
Fire: No
Pressure: No
Reactivity: No
Australian Hazchem Code: NONE ALLOCATED
Poison Schedule:NONE ALLOCATED

SECTION 16 Additional Information

Conditions aggravated / target organs: Danger! May be fatalif swallowed orinhaled. May cause burns to respiratory tract and severe irritation to skin and eyes. May affect kidneys. Oxalates can be absorbed through the lungs. Symptoms of poisoning include nervousness, cramps, cns depression. Person with preexisting conditions may be more susceptible. Note to physician: Carefully monitor cardiovascular, respiratory, neurologic and renal functions.



Revisions

6/28/2010	0.1	updated msds to 16 section from 10 section msds. STN
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