MSDS - Lactic Acid

9/25/2006

MATERIAL SAFETY DATA SHEET

BIRKO *Corporation*

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: **Lactic Acid**

Product Code: I00071

Distributed By

BIRKO Corporation
9152 Yosemite Street
Henderson, CO 80640
(303) 289-1090
www.birkocorp.com

Manufactured By:
Purac America, Inc

Emergency Phone Numbers

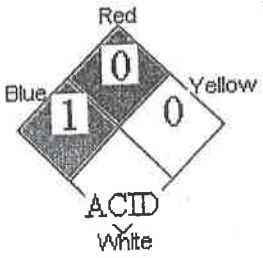
Transportation:
CHEMTREC (800) 424-9300
Non-Transportation:
BIRKO (303) 289-1090
(800) 525-0476

2. COMPOSITION / INFORMATION ON INGREDIENTS

CAS #	Component	Percent	Exposure Limit	
00079-33-4	Lactic Acid	88	PEL	None

3. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form	Liquid
Color	Colorless-yellow
Odor	Characteristic
Boiling Point	250° F
Freeze Point	62° F
Water Solubility	Complete
Specific Gravity	1.2
Vapor Pressure	30mm @ 20° C
Vapor Density	> 1
Evaporation Rate	< 1



NFPA Ratings

Blue - Health Hazard
4 - Deadly
3 - Extreme Danger
2 - Hazardous
1 - Slightly Hazardous
0 - Insignificant Hazard

Red - Fire Hazard
4 - Flash Point < 73°F
3 - Flash Point > 73°F and < 100°F
2 - Flash Point > 100°F and < 200°F
1 - Flash Point > 200°F
0 - Noncombustible

Yellow - Reactivity
4 - May Detonate
3 - Shock or Heat may Detonate
2 - Violent Chemical Change
1 - Unstable If Heated
0 - Stable

White - Specific Hazard
ACID - Acid
ALK - Alkali
COR - Corrosive
OXY - Oxidizer
P - Polymerization
^_^ - Radioactive
W - Use No Water

4. FIREFIGHTING MEASURES

Flash Point	Not Applicable
Extinguishing Media	Water, Carbon Dioxide, Dry Chemical , Foam Blanket
Special Procedures	Always wear self - contained breathing apparatus when fighting a chemical fire.
Unusual Fire/Explosion Hazard	Carbon Monoxide / Carbon Dioxide gases (toxic) liberated during combustion.

5. REACTIVITY

Stability	This product should maintain its physical character when stored closed at moderate temperatures, between 28 °F and 105 °F.
Hazardous Polymerization	This product does not polymerize under normal storage and use conditions.
Incompatible Materials	Chlorine Compounds, Cyanides, Amphoteric Metals (Aluminum, Brass, Copper, Tin, Zinc), Strong Alkali
Decomposition Products	Carbon Monoxide / Carbon Dioxide gases (toxic) liberated during combustion.

HMIS

0	FLAMMABILITY
2	HEALTH
0	REACTIVITY
B	Personal Protection

Personal Protective Index

A 

B 

C 

D 

E 

F 

G 

H 

I 

J 

K 

X Ask your supervisor

Hazard Index

4 - Severe
3 - Serious
2 - Moderate
1 - Slight
0 - Minimal

6. POTENTIAL HEALTH EFFECTS

Routes of Entry	Eye contact, Skin contact, Inhalation, Ingestion
Acute / Chronic Inhalation	This product and its solutions, in mist form will strongly irritate mucosal membranes, bronchial passages, and lung tissue.
Acute / Chronic Skin Contact	If allowed to remain on skin for extended periods of time irritation may occur.

Acute / Chronic Eye Contact	Irritates on contact. Corneal damage possible with extended exposure.
Ingestion	Causes burns of gastrointestinal tract. Harmful or fatal if swallowed.

7. FIRST AID MEASURES

Inhalation	Remove from exposure. Administer oxygen if breathing is difficult. Resuscitate if necessary. Get medical help immediately.
Skin Contact	Promptly Rinse exposed areas with water. Do not wear contaminated clothing until it has been laundered. If irritation persists, consult physician.
Eye Contact	Immediately rinse eyes thoroughly in cool running water for at least 15 minutes. If irritation persists, or inflammation or swelling occurs, seek medical attention.
Ingestion	DO NOT induce vomiting. Have a conscious victim drink milk or water to dilute. Never give an unconscious person anything by mouth. Get medical help immediately.

8. ACCIDENTAL RELEASE MEASURES

Avoid contamination of food, feed, waterway, or groundwater. If possible, capture material and contain for re-use or disposal. Alternatively, absorb into earth, clay, sawdust, or commercial absorbent, and contain for disposal. Remainder may be neutralized with baking soda (some Carbon Dioxide gas will evolve) or lime, then rinsed to a sewer.

9. WASTE DISPOSAL CONSIDERATIONS

Dispose in approved landfill according to Federal, State, and Local Regulations.

10. HANDLING AND STORAGE

Do not contaminate food, feed, or natural water. Keep container closed when not in use. Store in a cool, dry location. Supplier not responsible for disposition of this product. Do not reuse container.

NOTE: Lactic acid is stable in aqueous solutions up to 329°F. Discoloration may occur at high temperatures or with extended storage. Recommend storage between 50-100°F.

11. EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye Protection	Safety Glasses
Skin Protection	Impermeable Gloves. Wash exposed areas after handling.
Respiratory Protection	NIOSH approved self contained breathing apparatus for exposure above PEL.
Ventilation	General exhaust acceptable if PEL not exceeded.

12. TSCA CERTIFICATION

Birko Corporation certifies that all ingredients in this chemical formulation comply with all applicable rules or orders under TSCA and that we are not offering a chemical substance for entry in violation of TSCA or any applicable rule or order under TSCA.

13. APPROVALS

Reason for Issue	Amendments
Prepared By	Terry McAninch, Chemist
Approved By	Mike S. Brown
Title	Chief Operating Officer
Supercedes Date	9/19/2006
MSDS Number	I00071