
1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Code	43040287
Trade Name	Shibley BPR Developer
Manufacturer/Supplier	Shibley Company
Address	455 Forest St. Marlborough, Massachusetts 01752
Phone Number	(508) 481-7950
Emergency Phone Number	(508) 481-7950
Chemtrec #	(800) 424-9300
MSDS first issued	13 December 2001
MSDS data revised	
Prepared By:	Environmental, Health & Safety Department
Local Sales Company	Shibley Company, 455 Forest Street, Marlboro, MA 01752 (508-481-7950)

2. COMPOSITION/INFORMATION ON THE INGREDIENTS

Components without CAS numbers are Trade Secret

Component Name	CAS# / Codes	Concentration
lactic acid	50-21-5	< 80.00
Alkoxylated alcohols		< 10.00
water	7732-18-5	> 10.00

3. HAZARD IDENTIFICATION

Main Hazards	- Corrosive - Skin - Eye - Respiratory System
Routes of Entry	Inhalation, ingestion, eye and skin contact.
Carcinogenic Status	Not considered carcinogenic by NTP, IARC and OSHA
Target Organs	- Eye - Skin - Respiratory System
Health Effects - Eyes	Liquid will cause severe conjunctival irritation, corneal damage, and may result in loss of vision. Vapor or mist will cause severe conjunctival irritation and corneal damage.
Health Effects - Skin	Material will cause chemical burns.
Health Effects - Ingestion	Swallowing may have the following effects: - corrosion of mouth, throat and digestive tract
Health Effects - Inhalation	Exposure to vapor or mist may have the following effects: - severe irritation of nose, throat and respiratory tract

3. HAZARD IDENTIFICATION

Exposure to mist at high concentrations may have the following effects:
- severe irritation to nose, throat and respiratory tract and possibly lung damage

4. FIRST AID MEASURES

First Aid - Eyes	Immediately flush the eye with plenty of water for at least 20 minutes, holding the eye open. Obtain medical attention immediately.
First Aid - Skin	Immediately flush the skin with large quantities of water, preferably under a shower. Remove contaminated clothing while flushing skin. Continue washing for at least 20 minutes. Contaminated clothing should be washed or dry-cleaned before re-use. Obtain medical attention immediately.
First Aid - Ingestion	Do not induce vomiting. Wash out mouth with water. Have victim drink 1-3 glasses of water to dilute stomach contents. If vomiting occurs naturally, lean victim forward to reduce risk of aspiration. Repeat administration of water. Obtain medical attention immediately. Never administer anything by mouth if a victim is losing consciousness, is unconscious or is convulsing.
First Aid - Inhalation	Remove from exposure. If there is difficulty in breathing, give oxygen. Obtain medical attention immediately
Advice to Physicians	Treat symptomatically. Treat skin burns conventionally. Avoid aspiration.

5. FIRE FIGHTING MEASURES

Extinguishing Media	Use water spray, foam, dry chemical or carbon dioxide.
Special Fire-Fighting Procedures	No specific measures necessary.
Unusual Fire & Explosion Hazards	None known.
Protective Equipment for Fire-Fighting	Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures	Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal.
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6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Wear appropriate protective clothing. Wear respiratory protection.
Environmental Precautions	Prevent the material from entering drains or water courses. Advise Authorities if spillage has entered water course or sewer or has contaminated soil or vegetation.

7. HANDLING AND STORAGE

Handling	Use local exhaust ventilation. Avoid contact with eyes, skin and clothing. Emergency shower and eye wash facilities should be readily available. Avoid inhaling vapor. Keep container tightly closed when not in use.
Storage	Store in original containers. Storage area should be: - cool - dry - well ventilated - out of direct sunlight - away from incompatible materials
Other	None known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Standards	
lactic acid	None assigned.
Engineering Control Measures	Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (local exhaust), and control of process conditions.
Respiratory Protection	Respiratory protection if there is a risk of exposure to high vapor concentrations. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.
Hand Protection	Neoprene or nitrile gloves. Other chemical resistant gloves may be recommended by your safety professional.
Eye Protection	Chemical goggles and face shield.
Body Protection	- rubber or neoprene apron

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Color	Colorless - Straw colored
Odor	Mild
VOC (g/l)	0.0
Specific Gravity	1.19
pH	<1
Boiling Range/Point (°C/F)	Decomposes before boiling.
Flash Point (PMCC) (°C/F)	Corrosive
Explosion Limits (%)	Not applicable.
Solubility in Water	Completely soluble.
Vapor Density (Air = 1)	Not applicable.
Evaporation Rate	Not applicable.
Vapor Pressure	Not applicable.

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Conditions to Avoid	- contact with incompatible materials - heat
Incompatibilities	- Strong oxidizing agents - Strong reducing agents - Strong bases - Strong acids - Mild steel
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	- carbon monoxide - carbon dioxide - smoke and fumes

11. TOXICOLOGICAL INFORMATION

Acute Data	Lactic Acid: Oral LD50 (rat) 7600mg/kg. Dermal LD50 (rat) 7940mg/kg. This material is corrosive to the eye. This material is corrosive to skin.
Chronic/Subchronic Data	No relevant studies identified.
Genotoxicity	Lactic acid: Not mutagenic when tested in bacterial or mammalian systems.
Reproductive/Developmental Toxicity	No relevant studies identified.
Additional Data	None.

12. ECOLOGICAL INFORMATION

Mobility	The product will dissolve rapidly in water. The product is poorly absorbed
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12. ECOLOGICAL INFORMATION

	onto soils or sediments. The product will leach into soil.
Persistence/Degradability	The product is expected to be readily biodegradable.
Bio-accumulation	Product is not expected to bioaccumulate.
Ecotoxicity	The product may be harmful to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Product Disposal	Dispose of in accordance with all applicable local and national regulations. If discarded in its purchased form, this product would be considered a RCRA hazardous waste because it exhibits the corrosivity characteristic (D002).
Container Disposal	Labels should not be removed from containers until they have been cleaned. Empty containers may contain hazardous residues. Dispose of containers with care.

14. TRANSPORT INFORMATION

DOT Ground:	Corrosive liquid, acidic, organic, n.o.s.
UN Proper Shipping Name	Corrosive liquid, acidic, organic, n.o.s.
UN Class	(8) Corrosive
UN Number	UN3265
UN Packaging Group	II
N.O.S. 1:	Lactic Acid
N.O.S. 2:	Not applicable.
Subsidiary Risks	None.
CERCLA RQ	None.
Marine Pollutant	None.

15. REGULATORY INFORMATION

TSCA Listed	All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50. This product is not subject to a Section 5(e) Consent Order or Significant New Use Rule (SNUR).
TSCA Exemptions	
TSCA Sec.12(b) Export Notification	This product does not contain any substances subject to Section 12(b) export notification.

15. REGULATORY INFORMATION

WHMIS Classification	E
California Proposition 65	This product contains the following chemicals that have been found by the State of California to cause cancer, birth defects or other reproductive harm: - Ethylene Oxide (trace) - Propylene Oxide (trace)
SARA TITLE III-Section 311/312 Categorization (40 CFR 370)	Immediate health hazard
SARA TITLE III-Section 313 (40 CFR 372)	This product does not contain a chemical which is listed in Section 313 at or above de minimis concentrations.

16. OTHER INFORMATION

NFPA Rating- FIRE	0
NFPA Rating- HEALTH	2
NFPA Rating- REACTIVITY	0
NFPA Rating- SPECIAL	None.
Revisions Highlighted	
Abbreviations	CAS#: Chemical Abstract Services Number ACGIH: American Conference of Governmental Industrial Hygienists OSHA: Occupational Safety and Health Administration TLV: Threshold Limit Value PEL: Permissible Exposure Limit STEL: Short Term Exposure Limit NTP: National Toxicology Program IARC: International Agency for Research on Cancer R: Risk S: Safety LD50: Lethal Dose 50% LC50: Lethal Concentration 50% BOD: Biological Oxygen Demand Koc: Soil Organic Carbon Partition Coefficient. TLm: Median Tolerance Limit

Disclaimer

The data contained herein is based on information that Shibley Company believes to be reliable, but no expressed or implied warranty is made with regard to the accuracy of such data or its suitability for a given situation. Such data relates only to the specific product described and not to such products in combination with any other product and no agent of Shibley Company is authorized to vary any of such data. Shibley Company and its agents disclaim all liability for any action taken or foregone on reliance upon such data.