



AN IKONICS COMPANY

**Dual Cure LCE**  
Material Safety Data Sheet  
Issued: 2/17/04  
Supercedes: 10/3/03

**Section I - Chemical Product and Company Identification**

Manufacturers name            IKONICS Corporation  
Address                            4832 Grand Avenue, Duluth, MN 55807  
Telephone number                218 628-2217 Customer Service  
Emergency phone number        800 424-9300 Chemtrec USA / 703/527-3887 International (collect)  
Product name                    Dual Cure LCE  
Use                                 Water based emulsion

**Section II – Hazardous Ingredients**

<u>Ingredients</u>	<u>Percent</u>	<u>CAS#</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>VAPOR PSI</u>
Acrylate Oligomers	Trade secret	Trade secret	Not established	Not established	Not established
Photoinitiators	Trade secret	Trade secret	Not established	Not established	Not established

**Section III – Physical Data**

Appearance                      Blue liquid emulsion  
Boiling point                     100° C (212° F)  
Weight (per gallon)              8.82 lb/gal.  
Percent volatile (by wt)         61-65%  
Solubility in water               Miscible  
Evaporation rate                 Not Established  
Vapor density                     Not Established  
VOC                                 Not Applicable

**Section IV – Fire and Explosion Data**

Flash point                        Not determined.  
Extinguishing media              Class B fire extinguisher.  
Unusual fire & explosion hazards    Under high heat, decomposition may present a hazard.  
Special fire fighting procedures    For full protection, fire fighters are recommended to wear NIOSH-MSHA approved self-contained breathing apparatus and chemical resistant clothing.

**Section V – Health Hazard Data**

HMIS Codes                        1-0-0-H&O            Minimal=0, Slight=1, Moderate=2, Serious=3, Severe=4

*Effects of overexposure*

Eye contact                        No specific information available. May cause eye injury.  
Skin contact                        May cause severe skin injury or allergic reaction. May cause blister formation (burns).  
Inhalation                          No specific information available. Low volatility makes vapor inhalation unlikely.  
Ingestion                            No specific information available.

*First aid emergency procedures*

Eye                                  Flush with plenty of water for at least 15 minutes and seek medical attention.  
Skin                                  Wash with soap and water, should irritation occur, seek medical attention.  
Inhalation                          Remove to fresh air.  
Ingestion                            If appreciable quantities are swallowed, seek medical attention.

**Section VI – Reactivity Data**

Stability	Unstable___ Stable <u>X</u>
Conditions to avoid	Strong light and high heat.
Incompatibility (materials to avoid)	None
Hazardous decomposition products	Carbon monoxide & carbon dioxide
Hazardous polymerization	May occur __Will not occur <u>X</u>

**Section VII – Spill or Leak Procedures**

Spill cleanup instructions	Contain spills with absorbent material and dispose of saturated material.
Waste disposal method	Place leaking container in a well ventilated area. Dilute the spill with water and absorb the spill with inert material and dispose in accordance with federal, state, and local laws. Use proper PPE when cleaning up a spill.

We make no guarantee or warranty of any kind that the use or disposal of this product is in compliance with all federal, state, or local laws. It is the obligation of each user of the product mentioned herein to determine and comply with the requirements of all applicable statutes.

**Section VIII – Control Measures / Personal Protection**

Engineering controls	Ventilation – Local exhaust recommended but not required. Provide adequate ventilation as necessary.
<i>Personal Protection Equipment (PPE)</i>	
Gloves	Rubber or neoprene gloves are required.
Eye	Personal eye protection is required.
Respiratory	Wear O.S.H.A. (29CFR 1910.134) protection as necessary. Do not breathe vapors or mists.
Where contact may occur	Use a face shield, impervious body coverings, and boots (if exposure is severe).
Safety shower and eyewash	Should be available.

**Section IX – Handling and Storage**

Handling and storage information	Store away from extreme heat and do not freeze.
Other precautions	Industrial use only. Keep out of reach of children. Do not take internally. Avoid splashing in eyes.

**Section X – Regulation Information**

DOT classification	Not a DOT controlled material (United States).
TSCA	All ingredients are listed chemicals in the TSCA registry.
California (Prop 65)	This product contains chemical(s) known to the State of California to cause cancer (c) or reproductive (r) damage. <0.0016% Acetaldehyde (c) 75-07-0 Listed April 1, 1988

Approved by: VP Technology, Toshi Komatsu 218 628-2217 ext.142

Notice to reader

(Approved by U.S. Department of Labor “Essentially Similar” to form OSHA-20)

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