

MATERIAL SAFETY DATA SHEET



ULTRADEL® 7501

For use only as microelectronic coating

MSDS No. 07101000 ANSI/ENGLISH

1.0 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ULTRADEL® 7501

MANUFACTURER/SUPPLIER:

Amoco Chemical Company
200 East Randolph Drive
Chicago, Illinois 60601 U.S.A.

EMERGENCY HEALTH INFORMATION:
1 (312) 856-5371 (USA)

EMERGENCY SPILL INFORMATION:
1 (202) 483-7616 CHEMTREC (USA)

OTHER PRODUCT SAFETY INFORMATION:
(312) 856-3304

2.0 COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS#	Range % by Wt.
Gamma-butyrolactone	96-48-0	80-90
Polyimide	Trade Secret	10-20

(See Section 8.0, "Exposure Controls/Personal Protection", for exposure guidelines)

3.0 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Warning! Causes eye irritation. Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis. Causes mild respiratory irritation. Inhalation causes headaches, dizziness, drowsiness, and nausea, and may lead to unconsciousness. If swallowed, causes headaches, dizziness, drowsiness and nausea, and may lead to unconsciousness.

POTENTIAL HEALTH EFFECTS:

EYE CONTACT: Causes eye irritation.

SKIN CONTACT: Prolonged or repeated contact can defat the skin and lead to irritation and/or

dermatitis.

INHALATION: Causes mild respiratory irritation. Inhalation causes headaches, dizziness, drowsiness, and nausea, and may lead to unconsciousness.

INGESTION: If swallowed, causes headaches, dizziness, drowsiness and nausea, and may lead to unconsciousness.

HMIS CODE: (Health:2) (Flammability:1) (Reactivity:0)

NFPA CODE: (Health:2) (Flammability:1) (Reactivity:0)

4.0 FIRST AID MEASURES

EYE: Immediately flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

SKIN: Wash exposed skin with soap and water. Remove contaminated clothing and thoroughly clean and dry before reuse. Get medical attention if irritation develops.

INHALATION: If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

INGESTION: If swallowed, drink plenty of water, induce vomiting. Get immediate medical attention.

5.0 FIRE FIGHTING MEASURES

FLASHPOINT: 203°F(95°C) ASTM D93

UEL: Not determined.

LEL: Not determined.

AUTOIGNITION TEMPERATURE: Not determined.

FLAMMABILITY CLASSIFICATION: None

EXTINGUISHING MEDIA: Agents approved for Class B hazards (e.g., dry chemical, carbon dioxide, foam, steam) or water fog.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None identified.

FIRE-FIGHTING EQUIPMENT: Firefighters should wear full bunker gear, including a positive pressure self-contained breathing apparatus.

HAZARDOUS COMBUSTION PRODUCTS: Burning can produce carbon monoxide and/or carbon dioxide and other harmful products.

6.0 ACCIDENTAL RELEASE MEASURES

Remove mechanically or contain on an absorbent material such as dry sand or earth.

7.0 HANDLING AND STORAGE

HANDLING: Use with adequate ventilation. Keep container closed.

STORAGE: Store in cool, dry, well-ventilated area. Keep container closed. Store in dark; minimize exposure to oxygen.

8.0 EXPOSURE CONTROLS / PERSONAL PROTECTION

EYE: Do not get in eyes. Wear chemical goggles.

SKIN: Do not get on skin or clothing. Wear protective clothing and gloves.

INHALATION: Use with adequate ventilation. If ventilation is inadequate, use NIOSH/MSHA certified respirator that will protect against organic vapor and dust/mist.

ENGINEERING CONTROLS: Control airborne concentrations below the exposure guidelines.

EXPOSURE GUIDELINES:

Component	CAS#	Exposure Limits
Gamma-butyrolactone	96-48-0	No exposure limit established
Polyimide	Trade Secret	No exposure limit established

9.0 CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE AND ODOR: Viscous liquid. Clear. Yellow.

pH: Not determined.

VAPOR PRESSURE: Not determined.

VAPOR DENSITY: Not determined.

BOILING POINT: 399°F(204°C) (estimate)

MELTING POINT: Not determined.

SOLUBILITY IN WATER: Totally insoluble.

SPECIFIC GRAVITY (WATER=1): 1.1 (estimate)

VISCOSITY: 7000 cP at 20°C (approximate)

10.0 STABILITY AND REACTIVITY

STABILITY: Product is moisture sensitive. Product is photosensitive.

CONDITIONS TO AVOID: Protect from UV light. Avoid exposure to moisture or moist air.

MATERIALS TO AVOID: Avoid chlorine, fluorine, and other strong oxidizers.

HAZARDOUS DECOMPOSITION: None identified.

HAZARDOUS POLYMERIZATION: Will not occur.

11.0 TOXICOLOGICAL INFORMATION

ACUTE TOXICITY DATA:

EYE IRRITATION: Testing not conducted. See Other Toxicity Data.

SKIN IRRITATION: Testing not conducted. See Other Toxicity Data.

DERMAL LD50: Testing not conducted. See Other Toxicity Data.

ORAL LD50: Testing not conducted. See Other Toxicity Data.

INHALATION LC50: Testing not conducted. See Other Toxicity Data.

OTHER TOXICITY DATA: Specific toxicity tests have not been conducted on this product. Our hazard evaluation is based on information from similar products, the ingredients, technical literature, and/or professional experience.

No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH or the International Agency for Research on Cancer (IARC). No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Act (OSHA).

12.0 ECOLOGICAL INFORMATION

Ecological testing has not been conducted on this product.

13.0 DISPOSAL INFORMATION

Disposal must be in accordance with applicable federal, state, or local regulations. Determine waste classification at time of disposal. Conditions of use may render the spent product a hazardous waste. Enclosed-controlled incineration is recommended unless directed otherwise by applicable ordinances.

Since the emptied containers retain product residue, follow product insert warnings even after container is emptied.

14.0 TRANSPORTATION INFORMATION

U.S. DEPT OF TRANSPORTATION

Shipping Name Not Regulated

INTERNATIONAL INFORMATION:

Sea (IMO/IMDG)

Shipping Name Not Regulated

Air (ICAO/IATA)

Shipping Name Not Regulated

European Road/Rail (ADR/RID)

Shipping Name Not determined.

Canadian Transportation of Dangerous Goods

Shipping Name Not Regulated

15.0 REGULATORY INFORMATION

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR Part 302.4): This product is not reportable under 40 CFR Part 302.4.

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR Part 355): This product is not regulated under Section 302 of SARA and 40 CFR Part 355.

SARA TITLE III SECTIONS 311/312 HAZARDOUS CATEGORIZATION (40 CFR Part 370): This product is defined as hazardous by OSHA under 29 CFR Part 1910.1200(d). Hazardous categories for this product are: Acute = yes; Chronic = no; Fire = no; Pressure = no; Reactive = no.

SARA TITLE III SECTION 313 (40 CFR Part 372): This product is not regulated under Section 313 of SARA and 40 CFR Part 372.

U.S. INVENTORY (TSCA): Listed on inventory.

OSHA HAZARD COMMUNICATION STANDARD: Irritant. CNS Effects.

WHMIS Controlled Product Classification: D2B.

EC INVENTORY (EINECS/ELINCS): In compliance.

JAPAN INVENTORY (MITI): One or more components not listed on inventory - For research and development purposes only.

AUSTRALIA INVENTORY (AICS): One or more components not listed on inventory - For research and development purposes only.

KOREA INVENTORY (ECL): Not determined.

CANADA INVENTORY (DSL): One or more of the components of this product is not listed on the DSL.

PHILIPPINE INVENTORY (PICCS): Not determined.

16.0 OTHER INFORMATION

Prepared by:

Environment, Health and Safety Department

Issued: July 15, 1994

Supersedes: January 11, 1993

This material Safety Data Sheet conforms to the requirements of ANSI Z400.1.

This material safety data sheet and the information it contains is offered to you in good faith as accurate. We have reviewed any information contained in this data sheet which we received from sources outside our company. We believe that information to be correct but cannot guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as a permission or recommendation for the use of any product in a manner that might infringe existing patents. No warranty is made, either express or implied.