



Substance key: BBG706Z
Version

REVISION DATE: 10/10/2006
Print Date: 10/10/2006

Section 01 - Product Information

Identification of the company:	AZ Electronic Materials USA Corp. 70 Meister Avenue Somerville, NJ 08876 Telephone No.: 800-515-4164
Information on the substance/preparation	Product Safety: 908-429-3562
Emergency Tel. number:	800-424-9300 CHEMTREC

Trade name: AZ AX 1020P PHOTORESIST (US)

Section 02 - Composition information

Hazardous ingredients:

Chemical Name	CAS-no. (Trade secret no.)	Concentration [%]
Ethyl lactate	97-64-3	85.00 - 90.00
Arylsulfonium salt	67829000004-5766P	> 0.10

Non-hazardous ingredients:

Chemical Name	CAS-no. (Trade secret no.)	Concentration [%]
Modified acrylate polymer	67829000004-5629P	10.00 - 15.00

Section 03 - Hazardous identification

Emergency overview: OSHA combustible liquid; DOT flammable liquid., Partially dissolves in water., Clear, amber liquid., Irritating on contact or inhalation.

Expected route of entry

Skin contact:	yes
Ingestion:	no
Inhalation:	yes
Eye contact:	Contact with liquid and vapors.
Skin absorption:	yes



Substance key: BBG706Z
Version

REVISION DATE: 10/10/2006
Print Date: 10/10/2006

Health effects of exposure:

Component information:

Eye: Causes severe eye irritation. Skin: May cause mild skin irritation. Ingestion: No hazard in normal industrial use. Inhalation: High vapor concentration causes irritation to the nose, throat, and lungs. Systemic Effects: No hazard in normal industrial use. Reproductive and birth defects: Limited data suggest that exposures having no adverse effect on the mother should have no effect on the fetus.

Ethyl lactate (97-64-3)

Ethyl lactate is a skin, eye, and mucous membrane irritant.

Aryl sulfonium salt

Some pure aryl sulfonium salts have been found to be toxic or highly toxic and potentially fatal by various routes of exposure. This material was determined to be toxic by oral exposure, however, it was determined not to be dermally toxic nor was it observed to be produce any significant irritation or corrosivity. Results of an acute eye irritation study indicated that the material was only minimally irritating to the eye.

Listed carcinogen: IARC: NO NTP: NO OSHA: NO

HMIS:

Health: 2 Flammability: 2 Reactivity: 0 Personal protection: X

NFPA:

Health: 2 Flammability: 2 Reactivity: 0 Special notice: NONE

Section 04 - First aid measures

After inhalation: Remove victim to fresh air.
Consult physician.

After contact with skin: Immediately remove contaminated clothing. Flush affected area thoroughly with water. After flushing with water, remove residue with soap and water. If necessary, clean area with a cloth or paper towel wetted with acetone. Assure adequate ventilation. Dispose of cloth/towel in a suitable receptacle. Consult physician.

After contact with eyes: Flush thoroughly with water for 15 minutes. Get immediate medical help.

After ingestion: If person is conscious, give water or milk to dilute stomach contents.
Never give anything by mouth to an unconscious person.
Consult physician.



Substance key: BBG706Z
Version

REVISION DATE: 10/10/2006
Print Date: 10/10/2006

Section 05 - Fire fighting measures

Flash point:	126 °F Method: closed cup
Suitable extinguishing media:	Carbon dioxide, water, alcohol resistant foam, dry chemical.
Special fire fighting procedure:	Use self-contained breathing apparatus and full protective clothing. Use water spray to cool drums in fire area.
Special hazards from the substance itself, its combustion products or from its vapours:	Thermal decomposition may generate carbon dioxide, carbon monoxide, oxides of sulfur, volatile organic residues and hydrogen fluoride.
Unusual fire and explosion hazards:	Solvent vapors., Emits toxic fumes under fire conditions.

Section 06 - Accidental release measures

Steps to be taken in case of spill or leak:	Wearing appropriate personal protective equipment, contain spill, ventilate area of spill or leak, remove all sparking devices or ignition sources, collect onto inert absorbent, and place in a suitable container.
--	--

Section 07 - Handling and Storage

Advice on safe handling:

Keep away from heat and flame.
Avoid breathing vapors and contact with skin, eyes, and clothing.
Use only with adequate ventilation and proper protective eyewear, gloves, and clothing.
Wash thoroughly after handling.
Keep container closed.

Further information for storage conditions:

Store at appropriate temperature. See label for details.
Store in original container.
Transport and store under dry conditions tightly closed and protected from heat and light.

Section 08 - Exposure Control / personal protection

Respiratory protection:	Chemical cartridge respirator recommended for exposures exceeding TLV.
--------------------------------	--



Substance key: BBG706Z
Version

REVISION DATE: 10/10/2006
Print Date: 10/10/2006

Hand protection: Solvent Resistant Gloves.
Eye protection: Safety eyewear to protect against splashes.
Body protection: Clothing suitable to prevent skin contact.
Additional advice on system design: Use local exhaust ventilation.

Section 09 - Physical and chemical properties

Form: Liquid
Color: Clear
Odor: Mild odor.
Solubility in water: The solvent is water soluble but the product forms two layers.
Density: 1.049 g/cm³
Starts to boil: 154 °C
Vapor pressure: 1.78 Torr
Relative vapor density: > 1
Loss on drying: 89 %

Section 10 - Stability and reactivity

Hazardous reactions: Stable.
Hazardous polymerization: Will not occur.
Conditions to avoid: Avoid contact with oxidizing agents. Avoid contact with alkaline materials.

Section 11 - Toxicological information

Acute oral toxicity: Testing in animals shows that this material is, not harmful (rat acute oral LD₅₀ > 5000 mg/kg).
Acute inhalation toxicity: Testing in animals shows that this material is, not harmful (LC₅₀ greater than 10,000 ppm or 200 mg/L)



Substance key: BBG706Z
Version

REVISION DATE: 10/10/2006
Print Date: 10/10/2006

Ethyl lactate (97-64-3) Acute oral toxicity:	LD50 rat > 5,000 mg/kg
Aryl sulfonium salt Acute oral toxicity:	LD50 rat 300-500 mg/kg
Ethyl lactate (97-64-3) Acute inhalation toxicity	LC50 rat > 5400 mg/m3 Exposure time: 8 h
Ethyl lactate (97-64-3) Acute dermal toxicity:	LD50 rabbit > 5,000 mg/kg
Aryl sulfonium salt Acute dermal toxicity:	LD50 rabbit > 2,000 mg/kg
Aryl sulfonium salt Eye irritation:	rabbit eye Method: OECD 405 - EEC 92/69, B.5 minimally irritant

Section 12 - Ecological information

Ethyl lactate (97-64-3) Fish toxicity:	LC50 320 mg/l
Ethyl lactate (97-64-3) Toxicity of aquatic invertebrates:	EC50 (Daphnia magna) 680 mg/l
Ethyl lactate (97-64-3) Algae toxicity :	IC50 2,200 mg/l

Section 13 - Disposal considerations

Product: Consult local, state, and federal regulations.
For disposal, this material is a flammable hazardous waste under RCRA.



Substance key: BBG706Z
Version

REVISION DATE: 10/10/2006
Print Date: 10/10/2006

Section 14 - Transport information

Land transport

- DOT:
Not restricted

Sea transport

- IMDG:
UN-No: 1192
Proper technical name: ETHYL LACTATE, SOLUTION
Class: 3
Packaging group: III
Marine pollutant:
EmS: F-E, S-D
MFAG:
Labels: 3

Air transport

- ICAO/IATA-DGR:
UN/ID No.: UN 1192
Proper technical name: ETHYL LACTATE, SOLUTION
Class: 3
Packaging group: III
Labels: 3

Section 15 - Regulatory information

TSCA Status: One or more components of this product are not listed on the TSCA Inventory. The components, however, are covered by Low Volume Exemptions (LVEs). These LVE-based products may only be used in conventional photolithographic processes consistent with their design. For any applications outside of this intended purpose, contact the vendor first.

SARA (section 311/312): Reactive hazard: no
Pressure hazard: no
Fire hazard: yes
Immediate/acute: yes
Delayed/chronic: no

SARA 313 information: This product is not subject to SARA Title III Section 313 reporting requirements under 40 CFR 372.

Volatile organic compounds: Content VOC (g/l): 934 g/l
Method: calculated



Substance key: BBG706Z
Version

REVISION DATE: 10/10/2006
Print Date: 10/10/2006

Section 16 - Other information

Further information

The physical, chemical, and toxicological properties of this material have not been thoroughly investigated. Therefore, it should be employed under the supervision of an individual technically qualified to understand its potential hazards.

Label information

CAUTION!

COMBUSTIBLE LIQUID AND VAPOR Can be harmful on contact. Contains material that is a skin, eye, and mucous membrane irritant.

Keep away from heat and flame. Avoid breathing vapor. Avoid contact with skin, eyes, and clothing. Use only with adequate ventilation, and proper protective eyewear, gloves, and clothing. Wash thoroughly after handling. Keep container closed.

In case of contact, flush eyes with plenty of water for 15 minutes. Get medical attention immediately. Flush affected skin areas with water, and wash with mild soap and water. Remove contaminated clothing. If INHALED, remove individual to fresh air. If breathing is difficult, give oxygen. If ingested, give water or milk to dilute stomach contents. Never give anything by mouth to an unconscious person. Get medical attention immediately for ingestion or breathing problems or if skin contact is extensive.

In case of fire, use water, alcohol resistant foam, dry chemical, or CO₂.

If spilled, wear protective clothing, remove ignition sources, prevent sparks, and ventilate area. Absorb with inert material, collect, and place in a chemical waste container.

Keep sealed in original container. Store between 30 and 75 °F (-1 and 24 °C). Refrigerate whenever possible to extend shelf life. Allow product to reach ambient temperature prior to use. Empty container may contain harmful residue.

The solvent in this product is not photochemically reactive per Rule 102 of the California South Coast Air Quality Management District.

This information is supplied under the OSHA Hazard Communication Standard, 29 CFR 1910.1200, and is offered in good faith based on data available to us that we believe to be true and accurate. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable to the material. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate for that use. No warranty, express or implied, is made regarding the accuracy of this data, the hazards connected with the use of the material, or the results to be obtained from the use thereof. We assume no responsibility for damage or injury from the use of the product described herein. Data provided here are typical and not intended for use as product specifications. (R) and TM indicate trademarks of AZ Electronic Materials USA Corp., its business partners and suppliers.