1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Trade name : AZ 4562 Photoresist

Use of the substance/preparation.

Industry sector : Electronic industry
Type of use : Intermediate for electronic industry

Identification of the company:
AZ Electronic Materials (Germany) GmbH
Industriepark KalleAlbert
Rheingaustrasse 190-196
65203 Wiesbaden
Germany
Telefon-Nr. : +49 611 962 8563

Information about the substance / preparation:
Product Safety:
+49(0)6103-8079450 or +49(0)6126-227340

Emergency telephone number : +49 69 305 6418

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization
A mixture of polymer resins and diazo compounds in halogen free organic solvent.

Hazardous components

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS number</th>
<th>EINECS / ELINCS</th>
<th>Hazard symbols</th>
<th>R phrases</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Methoxy-1-methyl ethyl acetate</td>
<td>108-65-6</td>
<td>2036039</td>
<td>Xi</td>
<td>R10 R36</td>
<td>&gt; 50,00</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

Risk advice to man and the environment
Flammable.
Irritating to eyes.

4. FIRST AID MEASURES

General information : Remove soiled or soaked clothing immediately
If someone exposed to the product feels unwell, contact a doctor and show this safety data sheet.
Adhere to personal protective measures when giving first aid

After inhalation : Remove the casualty into fresh air and keep him calm.
Call in a physician immediately and show him the Safety Data
After contact with skin: In case of contact with skin wash off immediately with polyethylene glycol 400, then with plenty of water. If polyethylene glycol is not available, rinse off with plenty of water.

After contact with eyes: Rinse immediately with gently running water for 15 minutes, maintaining eyelids open. Consult at once an ophthalmologist or a physician.

After ingestion: Do not induce vomiting. Call in a physician immediately and show him the Safety Data Sheet. Let plenty of water be drunk in small gulps.

Advice to doctor:
Treatment: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: water spray jet
foam
dry powder
carbon dioxide

Special hazards from the substance itself, its combustion products or from its vapours: In case of fires, hazardous combustion gases are formed: Carbon monoxide (CO)
Nitrous gases (NOx)
Sulphur dioxide (SO2)

Special protective equipment for firefighting: Well closed full protective clothing (coat and pants) including helmet. Use self-contained breathing apparatus

Further information: Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: See: Exposure controls and personal protection.

Environmental precautions: Do not allow entry to drains, water courses or soil.

Methods for cleaning up/taking up: Pick up with liquid binding materials and if necessary fill in containers capable of being locked. Containers in which spilt substance has been collected must be adequately labelled Dispose of absorbed material in accordance with the regulations. Clean contaminated floors and objects thoroughly, observing
## 7. HANDLING AND STORAGE

### Handling

**Advice on safe handling**: Provide good ventilation of working area (local exhaust ventilation if necessary).

**Advice on protection against fire and explosion**: Keep away from sources of ignition.

### Storage

**Requirements for storage rooms and vessels**: Keep only in the original container.

**Further information for storage conditions**: Keep container tightly closed and dry in a cool, well-ventilated place. Protect from light.

**Advice on storage compatibility**: Do not store or transport together with foodstuffs.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Additional advice on system design

See chapter 7; no measures exceeding the ones mentioned are necessary.

### General protective measures

Do not inhale vapours
Avoid contact with eyes and skin
Observe the usual precautions for handling chemicals.

### Hygiene measures

At work do not eat, drink, smoke or take drugs.
Keep away from foodstuffs and beverages.
Wash hands before breaks and after work.
Use barrier skin cream.

### Respiratory protection

Use respiratory protection in case of insufficient exhaust ventilation or prolonged exposure.

### Hand protection

For short-term exposure (splash protection):
- Nitrile rubber gloves.
- Minimum breakthrough time / gloves: > 10 min.
SAFETY DATA SHEET according 2001/58/EG

AZ 4562 Photoresist
Substance key: SXR081518
Print Date: 13.03.2007
Version 1
REVISION DATE: 08.12.2005

Minimum thickness / gloves > 0,4 mm
These types of protective gloves are offered by various manufacturers. Please note the manufacturers' detailed statements, especially about the minimum thickness and the minimum breakthrough time. Consider also the particular working conditions under which the gloves are being used.

Eye protection : tightly fitting safety glasses
Body protection : protective clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Form : Liquid
Colour : yellow to red
Odour : ester-like

Safety data
pH value : not reasonable
Starts to boil : from 145 °C
Flash point : approx. 42 °C
Method: DIN 51755 (closed cup)
Ignition temperature : Note: not determined
Self-ignition temperature : Note: not determined
Lower explosion limit : Note: not determined
Upper explosion limit : Note: not determined
Vapour pressure : approx. 5 mbar at 20 °C
Density : approx. 1 g/cm3
at 20 °C
Solubility in water : Note: The solvent is partially water soluble but the product forms two layers.
Partition coefficient (n-octanol/water) : Note: not reasonable
Viscosity, dynamic : 380 - 500 mPas at 20 °C

10. STABILITY AND REACTIVITY

Hazardous decomposition : when handled and stored appropriately no dangerous
products decomposition products are known

Thermal decomposition: Note: No decomposition if used as prescribed.
Hazardous reactions: Incompatible with oxidizing materials.

11. TOXICOLOGICAL INFORMATION

Further information: No toxicological testing was carried out on the preparation. The product was classified on the basis of the calculation procedure of the Dangerous Preparations Directive (1999/45/EC).

12. ECOLOGICAL INFORMATION

Further information on ecology:
Further ecological information: Do not allow to enter soil, waterways or waste water. No ecological testing was carried out on the preparation. The product was classified on the basis of the calculation procedure of the Dangerous Preparations Directive (1999/45/EC).

13. DISPOSAL CONSIDERATIONS

Product: Product should be taken to a suitable and authorized waste disposal site in accordance with relevant regulations and if necessary after consultation with the waste disposal operator and/or the competent Authorities.
Uncleaned packaging: Packaging that cannot be cleaned should be disposed of as product waste.

14. TRANSPORT INFORMATION

**ADR:**
- Substance No.: UN 1993
- Description of the goods: FLAMMABLE LIQUID, N.O.S. contains (2-methoxy-1-methylethyl acetate)
- Class: 3
- Packaging group: III
- classification code: F1
- Risk No.: 30
- Labels: 3

**RID:**
- Substance No.: UN 1993
- Description of the goods: FLAMMABLE LIQUID, N.O.S. contains (2-methoxy-1-methylethyl acetate)
- Class: 3
### 15. REGULATORY INFORMATION

**Labelling according to EEC Directive**

The product is classified and labelled in accordance with EC directives/German regulations on dangerous substances.

**Hazardous component(s) to be indicated on label:**
- 2-Methoxy-1-methyl ethyl acetate

**Hazard symbols**
- Xi Irritant

**R phrases**
- 10 Flammable.
- 36 Irritating to eyes.

**S phrases**
- 25 Avoid contact with eyes.
National legislation

16. OTHER INFORMATION

Further information
Contains: < 0.5% 2-methoxypropylacetate, CAS no.: 70657-70-4. EC Classification : T, R 10-37-61

Text of the R-phrases which are allocated to the ingredients/components mentioned in section 2 of this Safety Data Sheet.

R10 Flammable.
R36 Irritating to eyes.

The data are based on the current state of our knowledge, and are intended to describe the product with regard to the requirements of safety. The data should not be taken to imply any guarantee of a particular or general specification. It is the responsibility of the user of the product to ensure to his satisfaction that the product is suitable for the intended purpose and method of use. We do not accept responsibility for any harm caused by the use of this information. In all cases, our general conditions of sale apply.