



# Safety data sheet in accordance with 2001/58/EC

## AZ MIR 701 PHOTORESIST (14 CPS) (US)

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Substance key: 000000100048  
Version : 1 - 4 / GB

Revision Date: 12.11.2004  
Date of printing : 17.11.2004

### 1. Identification of the substance/preparation and company

**Trade name**

AZ MIR 701 PHOTORESIST (14 CPS) (US)

**Material number:** 184517

**Use of the substance/preparation.**

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

**Identification of the company**

Clariant AZ (Deutschland) AG

Am Unisys-Park 1  
65840 Sulzbach  
Telephone no. : +49 6196 757-6100

**Information about the substance/preparation**

Product Safety: +1 908-429-3562

**Emergency telephone number :** +49 69 305 6418

### 2. Composition/information on ingredients

**Chemical characterization**

Preparation of polymers and diazo compounds in organic solvents (halogenfree).

**Hazardous ingredients**

n-Butyl acetate  
Concentration : < 15 %  
CAS number : 123-86-4  
EINECS number : 204-658-1  
R phrases 10 66 67

Ethyl lactate  
Concentration : > 65 %  
CAS number : 97-64-3  
EINECS number : 202-598-0  
Hazard symbols Xi  
R phrases 10 37 41

### 3. Hazards identification

Flammable.  
Irritating to respiratory system.  
Risk of serious damage to eyes.  
Warning - this preparation contains a substance not yet tested completely.

### 4. First aid measures

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### 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 Sheet.

### After contact with skin

In case of contact with skin wash off immediately with polyethylene glycol 400, then with plenty of water  
Consult a doctor if skin irritation persists.

### 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

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

## 5. Fire-fighting measures

### Suitable extinguishing media

alcohol-resistant foam  
dry powder  
carbon dioxide  
water spray jet

### 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)  
Carbon dioxide (CO<sub>2</sub>)  
Nitrogen oxides (NO<sub>x</sub>)  
Sulphur oxides

### Special protective equipment for firefighting

Use self-contained breathing apparatus  
Well closed full protective clothing (coat and pants) including helmet.

### 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

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### Methods for cleaning up/taking up

Take up with absorbent material (eg sand, kieselguhr, universal binder)  
When picked up, treat material as prescribed under heading "Disposal".  
Containers in which spill substance has been collected must be adequately labelled  
Dispose of absorbed material in accordance with the regulations.  
Clean contaminated floors and objects thoroughly, observing environmental regulations

### Additional information

Information regarding Safe handling, see chapter 7.  
Information regarding personal protective measures see, chapter 8.  
Information regarding Waste Disposal, see chapter 13.

## 7. Handling and storage

### Advice on safe handling

Provide good ventilation of working area (local exhaust ventilation if necessary).  
Take precautionary measures against electrostatic loading.

### Advice on protection against fire and explosion

Keep away from sources of ignition  
Take precautions against accumulation of electrostatic charge  
Observe the general rules of industrial fire protection

### Requirements for storage rooms and vessels

Keep only in the original container

### Advice on storage compatibility

Do not store or transport together with foodstuffs

### Further information on storage conditions

Protect from light.  
Keep container tightly closed and dry in a cool, well-ventilated place

## 8. Exposure controls/personal protection

### Additional advice on system design

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

### Ingredients with occupational exposure limits to be monitored

#### BUTYL ACETATE

CAS number : 123-86-4

UK OELs

UK EH40 OES (Table 2) Data

Revision : 2000

Time Weighted Average (TWA):

Values: 724 mg/m<sup>3</sup> 150 ppm

#### BUTYL ACETATE

CAS number : 123-86-4

UK OELs

UK EH40 OES (Table 2) Data

Revision : 2000

Short Term Exposure Limit (STEL):

Values: 966 mg/m<sup>3</sup> 200 ppm



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### General protective measures

Avoid contact with eyes and skin  
Do not inhale vapours  
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  
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

<b>Form :</b>	Liquid
<b>Colour :</b>	yellow to red
<b>Odour :</b>	characteristic
<b>Starts to boil :</b>	> 155 °C
<b>Flash point :</b>	48 °C Method : closed cup
<b>Vapour pressure :</b>	2.93 hPa Method : calculated
<b>Density :</b>	1.055 g/cm <sup>3</sup>
<b>Solubility in water :</b>	The solvent is water soluble but the product forms two layers.
<b>pH value :</b>	Not applicable
<b>Octanol/water partition coefficient (log Pow) :</b>	not reasonable
<b>Viscosity (dynamic) :</b>	not determined

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### 10. Stability and reactivity

**Thermal decomposition :** No decomposition if used as prescribed.

**Hazardous reactions**

Reactions with acids, alkalies and oxidizing agents.

**Hazardous decomposition products**

when handled and stored appropriately no dangerous decomposition products are known

### 11. Toxicological information

**Remarks**

Irritating effect to the skin and mucous membranes.  
Risk of serious damage to eyes  
LD50 values are not known. Health hazard effects cannot be ruled out because of skin contact, inhalation or swallowing of the product.  
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

**Remarks**

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 preparations directive.

### 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

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**ADR**

Proper shipping name: Flammable liquid, n.o.s.  
Class: 3  
Packing group: III  
UN no. UN 1993  
Primary risk: 3  
Hazard no. : 30  
Remarks Shipment permitted  
Hazard inducer(s): Ethyl lactate  
N-Butyl Acetate

**ADNR**

Proper shipping name: Flammable liquid, n.o.s.  
Class: 3  
Packing group: III  
UN no. UN 1993  
Primary risk: 3  
Remarks Shipment permitted  
Hazard inducer(s): Ethyl lactate  
N-Butyl Acetate

**RID**

Proper shipping name: Flammable liquid, n.o.s.  
Class: 3  
Packing group: III  
UN no. UN 1993  
Primary risk: 3  
Hazard no. : 30  
Remarks Shipment permitted  
Hazard inducer(s): Ethyl lactate  
N-Butyl Acetate

**IATA**

Proper shipping name: Flammable liquid, n.o.s.  
Class: 3  
Packing group: III  
UN/ID number: UN 1993  
Primary risk: 3  
Remarks Shipment permitted  
Hazard inducer(s): Ethyl lactate  
N-Butyl Acetate

**IMDG**

Proper shipping name: Flammable liquid, n.o.s.  
Class: 3  
Packing group: III  
UN no. UN 1993  
Primary risk: 3  
Remarks Shipment permitted  
Hazard inducer(s): Ethyl lactate  
N-Butyl Acetate  
EmS : F-E S-E

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### Labelling in accordance with EC-Directives

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

Warning - preparation contains a substance not yet fully tested.

### Hazard symbols

Xi Irritant

### Hazardous component(s) to be indicated on label

n-Butyl acetate  
Ethyl lactate

### R phrases

10 Flammable.  
37 Irritating to respiratory system.  
41 Risk of serious damage to eyes.

### S phrases

23.3 Do not breathe vapour.  
24 Avoid contact with skin.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
39 Wear eye/face protection.

## 16. Other information

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

10 Flammable.  
37 Irritating to respiratory system.  
41 Risk of serious damage to eyes.  
66 Repeated exposure may cause skin dryness or cracking.  
67 Vapours may cause drowsiness and dizziness.

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.