

AZ 100 Remover

Stripper for positive working Photoresist

Description

AZ 100 Remover is especially designed for stripping positive working photoresists like the AZ Photoresists. The stripper is free of phenols, chromates, chlorinated hydrocarbons or metal ions. The remover can be mixed with water in any ratio.

Table 1

Physical and Chemical Properties

Density (at 25°C)	0.955 kg/l
Color (Alpha)	max. 20
Flashpoint (AP)	72 °C
Normality (potentiometric)	3.1 mol/l
Boiling range	159 – 194 °C

Processing

Bath Make-up

AZ 100 Remover is a ready to use solution. A 1 : 1 mixture with water is possible. On thin films like aluminum the use of the undiluted AZ 100 Remover is recommended.

Process Sequence

Removal of the resist occurs most adequately in a two tank system. In the first bath the majority of the resist is stripped; in the second tank the resist residues are removed.

As indicated in table 2, the total immersion time depends on the bath temperature and the thermal treatment of the resist structures. Use mechanical or nitrogen burst agitation.

After stripping, the substrates are rinsed in deionized water, followed by drying in a rinse dryer.

Table 2

Stripping Capability of AZ 100 Remover

Bake temperature of resist °C	Remover Temperature °C	Stripping time min.
120	21	5
140	21	10
150	50	5
180	80	5
190	80	10

Determination of Normality

Procedure

Put about 1,5 g of the remover, weighed to an accuracy of 0.001 g, into an Erlenmeyer flask and immediately add approximately 90 ml deionized water. The titration is performed by an automatic potentiometric titrator (i.e. Titroprocessor 672, Metrohm) or by manual titration. In the latter case add 3 drops of the indicator (i.e. 0.1% aqueous solution of Methyl red and titrate to endpoint with Hydrochloric acid (HCl) 0.5 N.

$$\text{Normality of AZ 100 Remover} = 0.477 \times \frac{\text{(ml HCl)}}{\text{(g AZ 100 Remover)}}$$

Waste Disposal

After acidification with hydrochloric acid (3.5%) to pH = 8.5, AZ 100 Remover is bio-logical degradable. At all times local regulations should be observed!

Handling Precautions

Warning

Before using refer to safety data sheet and technical bulletin. Open container only after adjustment to room temperature.

Technical data sheet

Technisches Datenblatt

First aid

If eye contact:

Flush with water for at least 15 minutes.

Contact physician.

If skin contact:

Wash affected areas with soap and water.

If inhaled (mist):

Move into fresh air.

Equipment Compatibility

AZ 100 Remover is up to temperatures of 40 °C compatible to polyvinylchloride and to polypropylene up to 55 °C. For elevated temperatures material like quartz, stainless steel and PTFE are recommended.

Storage

Keep in sealed original containers.

Store between 0 – 35 °C.

Shelf life is limited. The **expiration date** is printed on the label of every bottle

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